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New records of histerid beetles (Coloeptera: Histeridae) from Taiwan, with description of a new species

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The occurrence of ten histerid beetles in Taiwan was documented and studied. A new species, *Margarinotus (Grammostethus) taiwanus* is described. Six species are reported for the first time from Taiwan and distributional features for some species discussed. *Platylister (Popinus) unicus* (Bickhardt, 1912) is new to Nepal. *B. (M.) niponicus* should be replaced by *B. (M.) tonkinensis* in the list of Taiwanese histerids.

Key words: Histeridae, Taiwan, *Margarinotus taiwanus*, new record, Nepal

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INTRODUCTION

The study is based on the examination of the material from the collections of the Taiwan Agricultural Research Institute, Wufeng (TARI) as well as from personal collections of T. Lackner˙s (CHTL) and S. Mazur (CHSM). The abbreviations used in description are as follows: PE- length from the anterior pronotal margin to the elytral apex; digits 0.1-0.5- distance between punctures measured by their own diameter.

ANALYTICAL PART

***Abaeletes perroti* (Cooman, 1940)**
Aeletes (Abaeletes) perroti Cooman, 1940: 31
Abaeletes perroti: Gomy, 1977: 104, 108 [figured]

Material examined: TAIWAN, Taitung: Road No. 9, 402 km, after Taimali, Jhengsing, alt. ± 150 m, decaying wood rests in *Gmelina arborea* forest, 2 ex., 12-IV-2007, S. Vit.; Road No. 20, after Chulai, 202 km, 300 m, plain forest litter, sifted?, 1 ex., 8-IV-2007, S. Vit; Road No. 9, env. Luye, High Terrace (Gaotai Tea Area), alt. ± 400 m, rotten straw, 1 ex., 11-IV-2007, S. Vit [CHTL].

Distribution: Nepal, India, Vietnam. New to Taiwan.

***Abraeomorphus formosanus* (Hisamatsu, 1965)**
Bacanius formosanus Hisamatsu, 1965: 130
Abraeomorphus formosanus: Mazur, 2007: 68

Material examined: TAIWAN, Taitung: Road No. 20, after Li-Tao, 174 km, alt. 1300 m, mountain forest litter, sifted, 3 ex., 8-IV-2007, S. Vit [CHTL].
Distribution: Taiwan.

***Atholus bifrons* (Marseul, 1854)**
Hister bifrons Marseul, 1854: 545
Atholus bifrons: Lewis, 1906: 402; Desbordes, 1917: 323 [keyed]

Material examined**:** TAIWAN, Taipei: Taishan, 1 ex., 10-IX-2007, H.-T. Cheng [TARI].

Distribution: India, Indonesia (Sumatra), Thailand, Vietnam, China (Hongkong). New to Taiwan.

***Bacanius (Bacanius) mikado* (Lewis, 1892)**
Abraeus mikado Lewis, 1892: 356
Bacanius mikado: Schmidt, 1893: 238
Bacanius (Bacanius) mikado: Kryzhanovskij & Reichardt, 1976: 268, 269 [described and keyed]

Material examined: TAIWAN, Taitung: Road No. 20, after Li-Tao, 174 km, alt. 1300 m, mountain forest litter, sifted, 2 ex., S. Vit [CHTL].

Distribution: Japan, China (Anhui), Taiwan.

***Bacanius (Mullerister) tonkinensis* Cooman, 1936**
Bacanius (Mullerister) tonkinensis Cooman, 1936: 135-137 [described and keyed]

Material examined: TAIWAN, Kaoshiung: Kosempo (= Chiasien), 1 ex., VII-1911, H. Sauter, [CHSM]; TAITUNG: Road No. 20, after Chulai, 202 km, 300 m, plain forest litter, 52 ex., 8-IV-2007, S. Vit; Road No. 9, env. Luyeh (Janghang), high hinterland, alt. ± 900 m, decaying wood rests, 8 ex., 11-IV-2007, S. Vit; Road No. 11, W-Tulan, Moonlight-Inn, alt. ± 200 m, forest litter, 34 ex., 13-IV-2007, S. Vit; Road No. 9, Luye, High Terrace (Gaotai Tea Area), alt. ± 300 m, rotten straw, 9 ex., 12-IV-2007, S. Vit; Road No. 9, 402 km, after Taimali, Jhensing, alt. ± 150 m, decaying wood rests in *Gmelina arborea* forest, 4 ex., 8-IV-2007, S. Vit; Road No. 20, before Li-Tao, 180 km, alt. 1000 m, base of rock (washing), 37 ex., 12-IV-2007, S. Vit; Road No. 20, 184 km, alt. ± 600 m, forest litter (sifted), 2 ex., 10-IV-2007, S. Vit; HUALIEN: Road No. 23, 7.5 km, alt. ± 400 m, farming gully litter, 3 ex., 12-IV-2007, S. Vit [CHTL]; NEPAL: Kosi, val. Arun, (ss/Num), 1050 m, 22-IV-1984, 1ex., Löbl & Smetana, [CHSM]; THAILAND: NE Bangkok, Khao Yai Nat. Park, 750-850 m, 1 ex., 26-XI - 3-II-1985, Burckhardt & Löbl [CHTL, CHSM].

Distribution: Vietnam. New to Nepal, Thailand and Taiwan.

Remarks: It was recorded from Taiwan as *"Bacanius niponicus* Lewis?*"* by Bickhardt (1913: 177) and Mazur (2007: 68). A critical examination of the original specimen from Kosempo (= Chiasien) and the syntype of *B. tonkinensis* as well as the specimens cited as "*niponicus*" in the list of histerids of Taiwan (Mazur, 2007: 68) revealed that these are *B. (M.) tonkinensis*. Thus, *B. (M.) niponicus* should be replaced by *B. (M.) tonkinensis* in the list of Taiwanese histerids.

***Eblisia sumatrana* (Bickhardt, 1912)**
Nicotikis sumatrana Bickhardt, 1912b: 228; Desbordes, 1919: 379 [keyed]
Eblisia sumatrana: Cooman, 1941: 324

Material examined**:** TAIWAN, Hualien: Tailuko, 1 ex., 7 ~ 14-IV-2007, Y.-F. Hsu; 1 ex., 12 ~ 19-VII-2007, Y.-F. Hsu; NANTOU: Tatachia, 2 ex., 20 ~ 27-V-2006, C.-S. Tsung; ILAN: Fushan Botanical Park, 1 ex., 19 ~ 26-IV-2006, C.-S. Tsung [TARI].
Distribution: Indonesia (Java, Sumatra, Borneo), Myanmar, Thailand, Vietnam, Taiwan.

Remarks: Previous record of this species from "Taiwan" was by Mazur (1997: 81) based on the following material: TAIWAN, Taichung: Wufeng, 100 - 120 m, 1 ex., 14-IX-1990, A. Smetana [CHSM].

***Hister aheneus* Cooman, 1938**
Hister aheneus Cooman, 1938: 186; Mazur, 2005: 82, 83 [variability, figured]

Material examined: TAIWAN, Nantou: Tatachia, 4 ex., 16 ~ 23-VI-2007, C.-S. Tung; ILAN: Fushan Botanical Park, 2 ex., 13 ~ 20-V-2007, C.-S. Tung;

1 ex., 20 ~ 27-V-2005; 2 ex., 14 ~21-VI-2007; 1 ex., 11 ~ 18-VIII-2007, [TARI, CHSM].

Distribution: Vietnam. New To Taiwan.

***Lewisister excellens* Bickhardt, 1912**
Lewisister excellens Bickhardt, 1912b: 222; Ōhara et all., 2001: 60 [figured]

Material examined: TAIWAN, Taitung: Road No. 20, after Chulai, 202 km, 300 m, plain forest litter, sifted, 1 ex., 8-IV-2007, S. Vit [CHTL].

Distribution: Nepal, Indonesia (Java, Sumatra, Borneo), Thailand. New to Taiwan.

***Margarinotus (Grammostethus) taiwanus* sp. nov.** (Figs. 1-10)

Body (Fig. 1) elongate-oval, convex, black and shiny. Dorsal side finely and rarely punctulate, sometimes the elytra more coarsely punctate. Forehead a little concave medially. Frontal stria complete, subcariniform, arcuate medially or feebly and outwardly bent at middle. Mandibles convex, extremely finely punctulate. Scapus and funiculus pitch-brown, antennal club tomentose, with two distinct sutures.

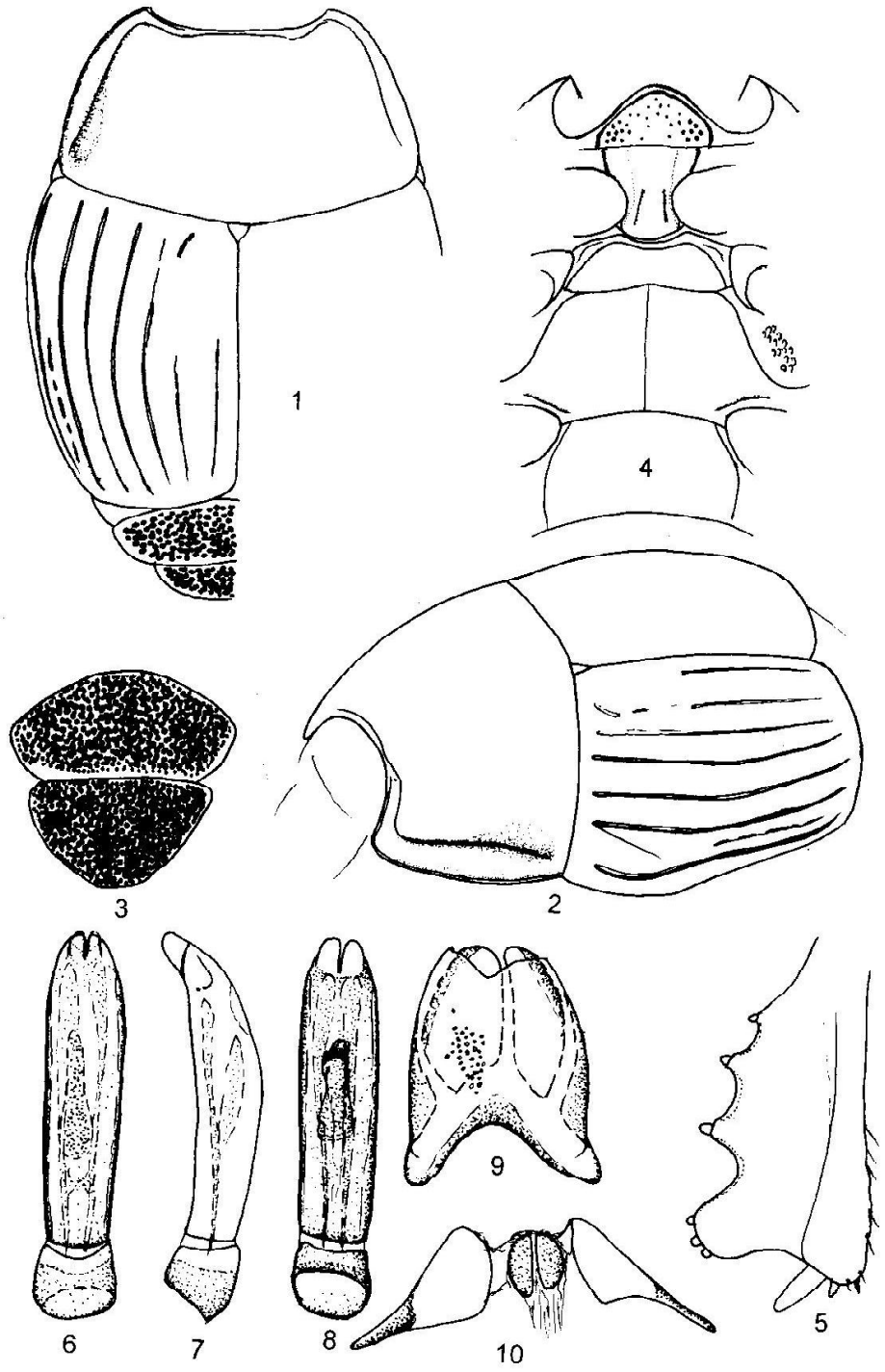
Pronotum (Fig. 2) rounded laterally. Marginal pronotal stria complete at sides, widely interrupted behind the head and replaced here by an apical stria. Lateral stria distinct, incised and feebly crenate, a little sinuous basally, united with the apical stria. Pronotal margins between marginal and lateral stria weakly swollen. Hind pronotal angles with a shallow, longitudinal impression along the lateral stria. Pronotal base with an indistinct, round fovea in front of scutellum. Epipleural fossete of elytra flat or feebly concave, covered with some coarse punctures along outer margin. Marginal elytral stria absent. Marginal epipleural stria complete. External subhumeral stria complete, deeply incised. There is sometimes an additional row of elongate punctures or shortened stria between the subhumeral and first dorsal stria. Oblique humeral stria present on basal 1/4. Dorsal striae incised, 1-4 complete or the 4th one abbreviated at base or marked here as a row of elongate punctures). Fifth dorsal stria abbreviated basally, not reaching the middle of elytra and sometimes with a short, arcuate rudiment at elytral base. Sutural stria a little longer, present on apical half of elytra.
Pygidial segments a little convex (Fig. 3). Propygidium feebly, shallowly concave at sides, its surface very densely and coarsely (0.1 - 0.5) punctured. Punctation of pygidium similar to propygidial one.

Prosternal lobe (Fig. 4) round, distinctly margined anteriorly, shallowly and finely punctulate, more coarsely at sides. Prosternal keel very finely punctulate, with two short carinal striae at base, reaching to 1/3 of prosternal length. Lateral prosternal striae distinct, divergent anteriorly. Mesosternum feebly emarginate at anterior margin, very finely and rarely punctulate. Marginal stria complete, subcariniform, reaching the meso-metasternal suture but not united with lateral metasternal striae. Meso-metasaternal suture subcariniform, a little sinuate medially. Metasternum as punctulated as mesosternum. Median line fine. Metasternal apex in front of hind coxae with short, impressed fragments of apical line. Lateral metasternal stria subcariniform, joining the meso-metasaternal suture, extending obliquely and posteriorly, united arcuately with oblique stria which extends inwards from the middle of metasternal-metepisternal suture. Lateral disc of metasternum covered with large, round punctures. Intercoxal disc of 1st abdominal sternum distinctly margined laterally.

Legs paler as body, pitch-brown, a little expanded. Foretibia (Fig. 5) with 4 dents on outer margin, the 1st one enlarged, with 3 spines.

Length: total 5.0 - 6.0 mm, PE: 3.5 - 3.8 mm. Width: 3.2 - 3.6 mm.

The genital structure of the male as figured (Figs. 6-10).



Figs. 1-10. *Margarinotus (Grammostethus) taiwanus* sp. nov. 1 - body, dorsal view, 2 - body, lateral view, 3 - propygidium and pygidium, 4 - ventral side, 5 - foretibia, 6-8 - edeagus, 6 - dorsal view, 7 - lateral view, 8 - ventral view, 9 - 8th tergite, 10 - 9th and 10th tergite

Material examined: Holotype B&, TAIWAN; Nantou: Tatachia, 23~30-VI-2007, C.-S. Tung [TARI].

Paratypes: Three specimens of both sexes, data as for holotype [TARI, one of them deposited in CHSM]; HUALIEN: Hsinpaiyang, 07~14-IV-2007, 1 @&, leg (?). Y.-F. Hsu [TARI].

Distribution: Taiwan.

Diagnosis: This species may be easily recognized by the curious shape of foretibia, being not multidentate, not only from the Taiwanese species (Ōhara, 1999: 6) but also from the remaining representatives of the subgenus *Grammostethus* Lewis as defined by Ōhara (1989: 36-37).

***Onthophilus flavicornis* Lewis, 1884**
Onthophilus flavicornis Lewis, 1884: 139; Ōhara & Nakane, 1986: 4-5, 9-10 [described and keyed]

Material examined**:** TAIWAN, Hualien, Pilu, alt. 2100 m, 24°10´58¨ E, 121°23´ 16¨, pitfall traps with carrions, 27 ex., 6-V-2006, Y.-F. Hsu [TARI]; CHIAYI: Fenchihu, 1400 m, 1 ex., 25-V-1977, S. Klapperich [CHSM].

Distribution: Japan. New to Taiwan.

ADDITIONAL RECORD

***Platylister (Popinus) unicus* (Bickhardt, 1912)**
Platysoma unicum Bickhardt, 1912a: 124; Ōhara, 1986: 93, 96-97, 98-99 [described and keyed]
Eblisia unicum: Mazur, 1999: 3
Platylister (Popinus) unicus: Mazur, 2007: 73

Material examined: NEPAL: Narayani/Chitwan, 13 km W Sauraha, Kasara, Chitwan NP, 180 m, deciduous forest, 1 ex., 20-VI-2005, A. Weigel [CHSM].

Distribution: Taiwan, Ryukyu Archipelago. New to Nepal.

Remarks: The previous distribution of this species was classified among Mandshuric elements (Mazur, 2007: 78). The new record from Nepal shows that it is a representative of the Himalayan element of distribution.

DISCUSSION

The record of *Platylomalus tonkinensis* Cooman (Oriental species) from Taiwan by Zhang & Zhou (2007) raised the known histerids fauna of Taiwan to 102. It is believed that, the subcortical ecological group continues to dominate among other histerids containing 53% of Taiwanese histerids. The Oriental element is one of the most numerous groups among histerids, comprising 32% of the whole. The histerids represented from Himalayan element has risen by 6%. These data confirm that our knowledge concerning to Taiwanese histerids is far from adequate and further studies are needed on the species composition and distribution in this geographical area.

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