DOI:10.6661/TESFE.2007005 台灣昆蟲Formosan Entomol. 27: 67-81 (2007) 研究報告 Research report

Formosan Entomologist
Journal Homepage: entsocjournal.yabee.com.tw

On New and Little Known Histerids (Coleoptera: Histeridae) from Taiwan with Additional Notes on the Species Composition and Zoogeography【Research report】

台灣地區閻魔蟲科之種類組成與動物地理學的增述並兼述一新種【研究報告】

Slawomir Mazur*
Slawomir Mazur*

*通訊作者E-mail : Slawomir.Mazur@wl.sggw.pl

Received: 2006/12/05 Accepted: 2007/02/26 Available online: 2007/03/01

Abstract

The occurrences of some histerids (Coleoptera: Histeridae) in Taiwan were analyzed. A new species, Coomanister scolyti is described and 12 species are for the first time reported from Taiwan. Abraeomorphus formosanus and Platylister unicum are a new combination in this study. The genus Eurylister has been separated from Eblisia. A list of Taiwanese histerids was compiled, and some distributional features were discussed.

摘要

本研究調查台灣地區閻魔蟲種類，描述一新種 (Coomanister scolyti) 與12新記錄種。Bacanius formosanus 移至 Abraeomorphus 屬，而 Eblisia unicum 移至 Platylister屬。Eurylister 屬則已經由 Eblisia 屬獨立出來。同時列出台灣地區閻魔蟲名錄，並探討其分佈特色。

Key words: Histeridae, Taiwan, new species, Eblisia, distribution

關鍵詞: 閻魔蟲科、台灣、新種、Eblisia、分佈。

Full Text: PDF(0.65 MB)

台灣昆蟲 27: 67-81 (2007)
Formosan Entomol. 27: 67-81 (2007)

On New and Little Known Histerids (Coleoptera: Histeridae) from Taiwan with Additional Notes on the Species Composition and Zoogeography

Slawomir Mazur* Department of Forest Protection and Ecology, Warsaw Agricultural University, Nowoursynowska 159, bld. 34, 02-776 Warszawa, Poland

ABSTRACT

The occurrences of some histerids (Coleoptera: Histeridae) in Taiwan were analyzed. A new species, *Coomanister scolyti* is described and 12 species are for the first time reported from Taiwan. *Abraeomorphus formosanus* and *Platylister unicum* are a new combination in this study. The genus *Eurylister* has been separated from *Eblisia*. A list of Taiwanese histerids was compiled, and some distributional features were discussed.

Key words: Histeridae, Taiwan, new species, *Eblisia,* distribution

Introduction

This paper is based chiefly on materials from the Department of Entomology, National Taiwan University (NTU), Taipei and on the materials collected during entomological trips (with the author's participation) into various parts of Taiwan. Some information was also obtained during examination of the Histeridae-collections of the Taiwan Forestry Research Institute (TFRI), Taipei, the Taiwan Agricultural Research Institute (TARI), Wufong, Taichung, and the private collection of Dr. Chi-Feng Lee (Research Center for Biodiversity, Academia Sinica, Taipei, Taiwan). In addition, the author's previous publications on the classification and taxonomy of the Histeridae also served as the bases for this study.

The abbreviations used in this study are listed as follows: CCFL, C.-F. Lee's collection; CHSM, S. Mazur's collection; NTUC, collection of the Department of Entomology, NTU; TFRIC, collection of the TFRI; TARIC, collection of the TARI; PE (description), length from the anterior pronotal margin to the elytral apex; (1-2) (description), distance between punctures measured by their diameter.

Systematic account

***Chaetabraeus (Mazureus) paria* (Marseul, 1856)**

Specimens examined: Southeastern TAIWAN, TAITUNG: Donghe, 24-IV-2006, cow dung, K. and S. Mazur leg., 1 ex.;

*Correspondence address
e-mail: Slawomir.Mazur@wl.sggw.pl

Kenting National Park (NP), 10-IV- 2006, cow dung, K. and S. Mazur leg., 4 ex. [CHSM].

Distribution: Pakistan, East India, SriLanka, Thailand, Sumatra. New to Taiwan.

***Teretrius (Neotepetrius) formosus* (Lewis, 1915)**

Previous records: Described and recorded so far only from one locality: "Formosa, Kotosho" (= Lanyu or Orchid Is., Taitung Co.) (Lewis, 1915: 54).

Specimens examined: TAIWAN, Wushe, 1150 m, 3-V-1983, Henry Townes leg, 1 ex., central TAIWAN. NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 7, 2-XI-2004, 1 ex. [CHSM].

Distribution: Taiwan

***Acritus tuberisternus* Cooman, 1932**

Specimens examined: Central Taiwan, NANTOU: Jhushan Park, 6-7-IV-2006, under bark, K. and S. Mazur leg, 2 ex. [CHSM].

Distribution: India, SriLanka, Myanmar (Burma), Vietnam, Laos, Malaysia, Mauritius. New to Taiwan.

***Bacanius (Mullerister) niponicus* Lewis, 1879**

Previous records: Recorded from Taiwan by Bickhardt (1913: 177) from Takao (= Kaoshiung City), Kosempo (= Chiasien) and Taihorin (= Dalin).

New localities: Central Taiwan, NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, nos. 2, 7, and 17, 26-VII-2004, no. 1, 15-VI-2004, 1 ex., no. 14, 29-VI-2004, 1 ex., no. 21, 17-X-2004, 1 ex. [CHSM, NTUC], Kinmen Is., KC 0524-0607/2004, 1 ex. [TFRIC].

***Bacanius (Bacanius) mikado* (Lewis, 1892)**

Specimens examined: Central TAIWAN. NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, nos. 3 and 9, 30-IV-2005, 2 ex. [CHSM].

Distribution: Japan, China (Anhui). New to Taiwan.

***Abraeomorphus formosanus* (Hisamatsu, 1965) comb. nov.**
Syn: *Bacanius fromosanus* Hisamatsu, 1965

Previous records: Known from Taiwan only from the type locality: C. Formosa, Hunbukei nr. Hori (Hisamatsu, 1965: 131).

New localities: TAIWAN. KAOSHIUNG: Tengjhih, 27-V-22-VI-2005, C.-L. Li leg, 1 ex., central TAIWAN. NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 5, 24-IX-2004, 1 ex., no. 12, 12-IV-2005, 1 ex., no. 23, 13-VII-2004, 1 ex. [CHSM, NTUC].

Distribution: Taiwan

Note. Because of the lack of both subhumeral and marginal elytral striae, it should be classified in the genus *Abraeomorphus* Reitter. This supposition was also noted in the original description: "Though having some of the characters of *Abraeomorphus,* I believe it belongs to *Bacanius*" (Hisamatsu, 1965: 131).

***Hypocacculus (Nessus) asticus* (Lewis, 1911)**

Specimens examined: TAIWAN. TAIPEI: Sanjhih, 10-VIII-2005, Lee and Chin leg., 7 ex., PINGTUNG: Kenting, 22-VII-2005, Y.-C. Yu leg., 13 ex. [CHSM, CCFL].

Distribution: Japan, South Korea. New to Taiwan.

Coomanister scolyti sp. nov.

Body (Fig. 1) convex, oval, pitch-black and shiny, legs and antennae paler, reddish-brown. Upper surface with ground punctulation consisting of groups of 2-3 closely placed, microscopic punctures, each group appearing to be a single puncture, giving the appearance of a

somewhat imbricate punctulation.

Head (Fig. 2) a little incised anteriorly, covered with large punctures on anterior 1/2, not too densely distributed (1-2), punctures becoming finer basally. Frontoclypeal stria absent, the supraorbital one thin but present, margining eyes. Labrum rounded, with 2 yellowish setae.

Pronotum narrowed anteriorly, its anterior angles jutting. Marginal stria complete, lying very close to margin laterally, sparsely crenate here and not visible from above, a little distant from anterior margin and strongly crenate. Pronotal sides with longitudinal band of coarse punctures, uniformly and not too densely distributed (1-3). Also a small group of large punctures in middle. Pronotal base with an irregular row of coarse punctures and well-limited depression in front of scutellum.

Elytral dorsal striae deep, crenately punctate, 1-4 complete, the 4th one arched inwardly at basal 1/4, the 5th and sutural stria abbreviated on basal 1/3. Outer subhumeral stria deep and crenately punctate, abbreviated basally. Humeral stria oblique and thin. Elytral marginal stria strongly impressed and carinate, angulate medially and prolongated at the elytral apex as an apical stria extending a little along suture. Epipleural marginal stria fine and complete.

Propygidium and pygidium (Fig. 4) convex. Propygidium covered with coarse punctures on basal 1/2, not too densely distributed (1-3). Pygidium impressed at anterolateral angles, with three large and deep fovea in each impression, sometimes also with additional fovea, arranged in an irregular row.

Anterior margin of prosternal lobe rounded apically, its marginal stria strongly reduced and well impressed, present only at 1/3 of apex. Basal angles strongly and obliquely excavated, disc of prosternal lobe covered with coarse punctures, moderately densely distributed (1-2). Prosternal keel narrow, its top even, disc impunctate. Carinal striae well impressed and a little sinuous inwardly, united anteriorly in a loop (Fig. 3).

Anterior margin of mesosternum emarginate medially, marginal stria complete, well impressed. Disc of mesosternum shiny, covered moderately densely (2-3) with same, imbricate punctulation as on upper side. Meso-metasternal suture strongly carinate and arcuate medially. Metasternal disc shiny, more-densely covered with imbricate punctulation (0.5-1.5), especially in middle. Lateral metasternal stria deep and strongly carinate, its lateral end reaching almost metepisternal-metasternal suture behind hind coxae. Lateral sides of metasternum with some very coarse punctures and with an irregular row of coarse punctures along hind coxae. Mesocoxal stria thin, extending along mesocoxal cavity and bent posteriorly.

Intercoxal disc of 1st abdominal sternum densely covered with imbricate punctulation (0.5-1.0), margined laterally by an impressed and carinate, inwardly arcuate stria and with some coarse punctures along this stria.

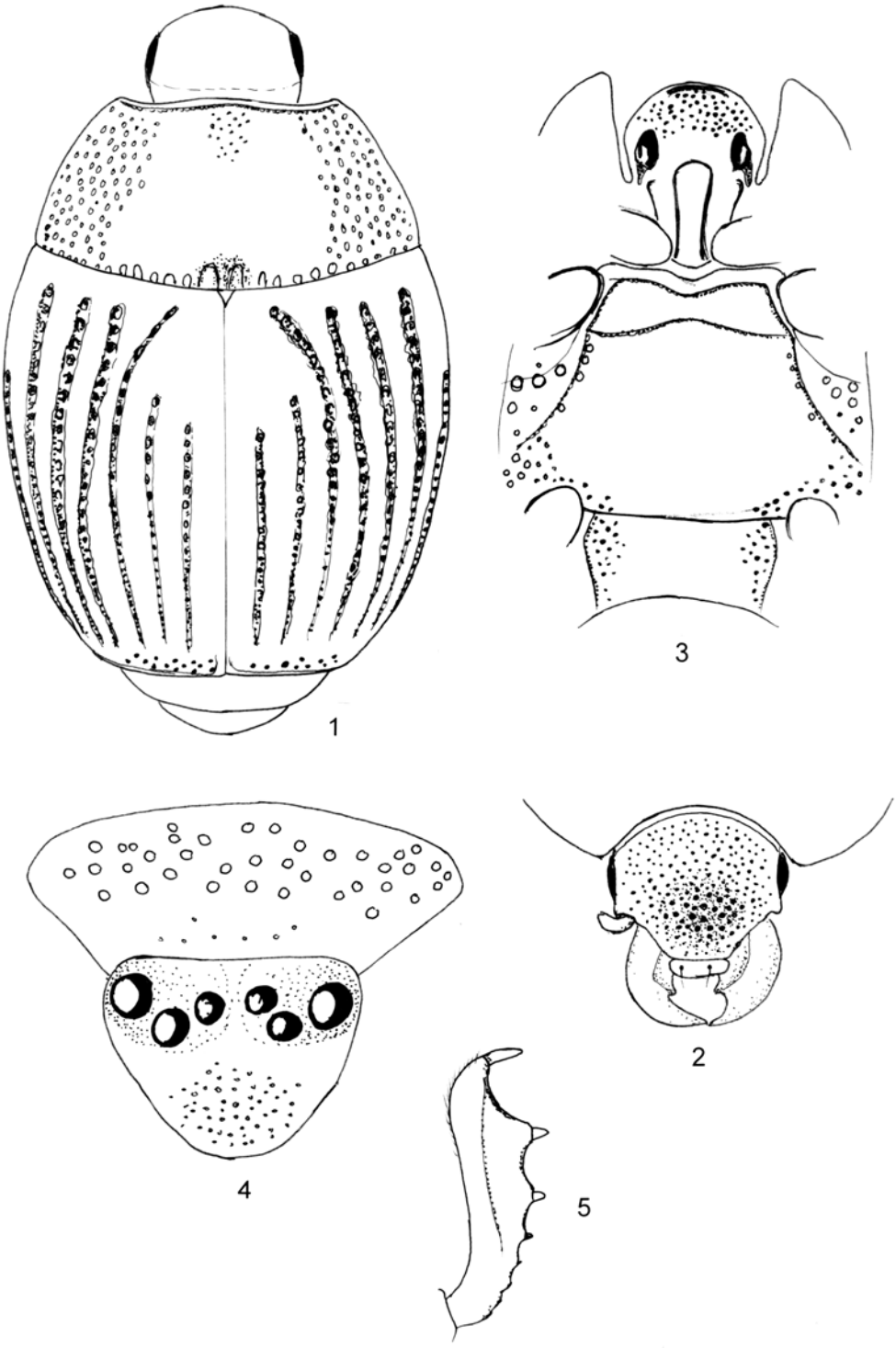
Protibiae (Fig. 5) dilated, with 3(+2) spinules at outer margin, the mid ones with 2-3 thin spinules and some setae and the hind tibiae with a row of short setae, rarely distributed.

Length: total 2.2-2.5 mm; PE: 1.9-2.1 mm. Width: 1.6-1.8 mm.

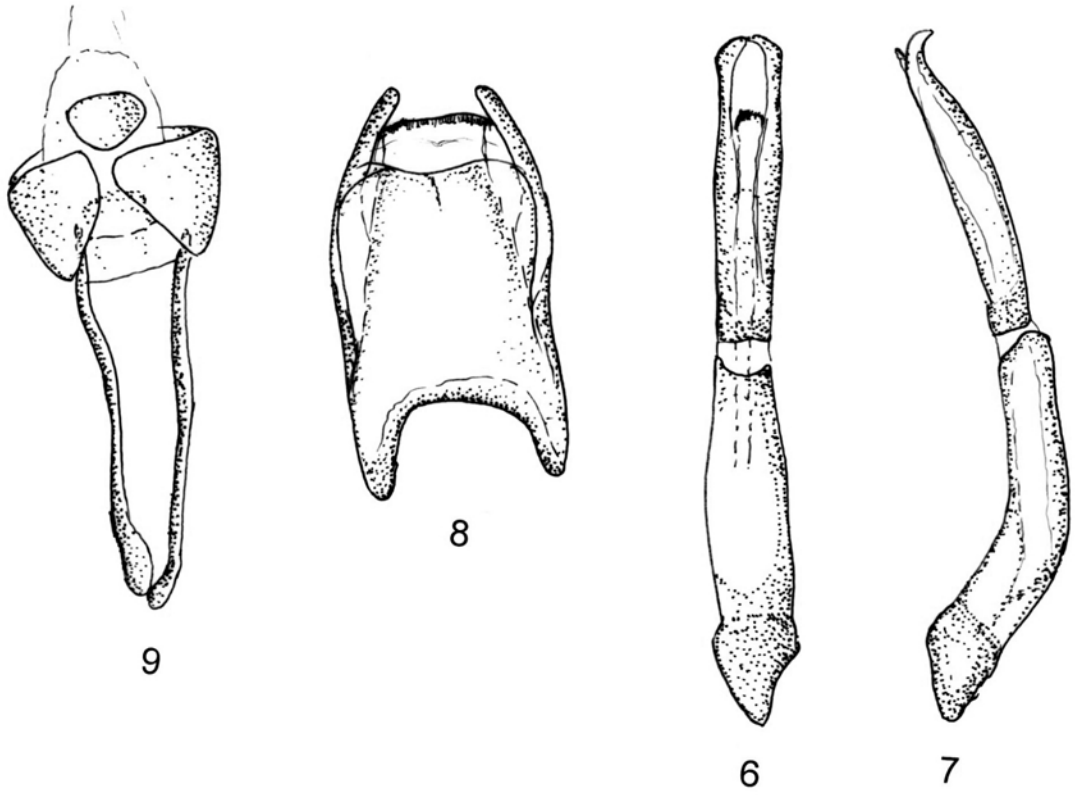
Male edeagus as figured (Figs. 6, 7). Parameres relatively long, ratio of length of parameres to basal piece about 0.78. Genital sterna as in Figs. 8, 9.

Holotype: a male, central TAIWAN. NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 15, 15-VI-2004, [NTUC].

Paratypes: 34 specimens (8 of them in the author's collection [CHSM]), both sexes, same locality as the holotype: central TAIWAN. NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap: no. 7, 30-IV-2004, 5 ex.; no. 8, 29-VI-2004, 1 ex.,



Figs. 1-5. *Coomanister scolyti* sp. nov. 1, Upper side; 2, head; 3, under side; 4, propygidium and pygidium; 5, foretibia.



Figs. 6-9. *Coomanister scolyti* sp. nov., genital structure. 6, 7, Edeagus; 6, dorsal view; 7, lateral view; 8, 8th tergite, dorsal view; 9, 9th and 10th tergites and 9th sternum, dorsal view.

26-VII-2004, 1 ex., 23-VIII-2004, 2 ex., 30-IV-2005, 2 ex., 17-V-2005, 1 ex.; no. 9, 29-VI-2004, 3 ex., 9-VIII-2004, 2 ex., 29-III-2005, 1 ex.; no. 13, 29-VI-2004, 1 ex., 26-VII-2004, 1 ex., 29-III-2005, 1 ex., 17-V-2005, 1 ex., no 14. 29-III-2005, 1 ex.; no. 15, 29-III-2005, 1 ex., 12-IV-2005, 1 ex.; no. 16, 29-III-2005, 1 ex.; no. 17, 12-IV-2005, 1 ex.; no. 18, 26-VII-2004, 1 ex.; no. 20, 29-III-2005, 1 ex.; no. 23, 12-IV-2005, 2 ex.; no. 25, 19-VI-2004, 1 ex., 29-III-2005, 2 ex. [CNTU].

Derivatio nominis. "scolyti" – emphasizing the connection with bark beetles.

Differential diagnosis. This is a 3 species of the genus *Coomanister* Kryzhanovskij described. It differs from *C. scrobipygum* (Cooman) by the foveate pygidium and from *C. fryi* (Lewis) by the more-distinct and coarser ground punctulation in the scutellar region of the elytra and by the lack of foveiform coarse punctures replacing the 5th dorsal stria basally.

***Carcinops troglodytes* (Paykull, 1811)**

Specimens examined: Central TAIWAN. NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 14, 12-IV-2005, 1 ex., [NTUC]; southeastern TAIWAN. TAITUNG: Li-cha, 26-IV-2006, from under bark, K. and S. Mazur leg., 2 ex. [CHSM].

Distribution: Tropicopolitan in distribution. New to Taiwan.

***Diplostix karenensis* (Lewis, 1892)**

Specimens examined: Central TAIWAN. NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 23, 26-VII-2004, 1 ex. [CHSM].

Distribution: A rare species, known only from Myanmar. New to Taiwan.

***Platylomalus submetallicus* (Lewis, 1892)**

Specimens examined: Central TAIWAN. NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 21, 23-VIII-2004, 1 ex. [CHSM].

Distribution: Sikkim, Myanmar, Vietnam, Thailand. New to Taiwan.

***Eulomalus pupulus* Cooman, 1937**

Specimens examined: Northeastern Taiwan, Fushan Botanical Garden, 15-III-2006, from under bark, K. and S. Mazur leg., 1 ex.; central Taiwan, Lienhuachih, TFRI, 28-III-2006, from under bark, K. and S. Mazur leg., 10 ex.; NANTOU: Sun link Sea Forest, 4-IV-2006, from under bark, K. and S. Mazur leg., 7 ex.; Tataka, 8-IV-2006, from under bark, K. and S. Mazur leg., 1 ex.; Jhushan Botanical Garden, 13-II-2006, from under bark, K. & S. Mazur leg., 1 ex. [CHSM], NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 20, 16-XI-2004, 1 ex. [NTUC], southwestern TAIWAN. KAOSHIUNG: Shanping Forest, 11-IV-2006, from under bark, K. and S. Mazur leg., 1 ex., Tengjhih, 22-V-22-VI-2005, C.-L. Li leg., 1 ex. [CHSM].

Distribution: Vietnam, Myanmar, Nepal, Indonesia (Sumatra, Borneo). New to Taiwan.

***Trypeticus sauteri* Bickhardt, 1913**

Previous records: Apart from typical localities (Formosa: Kosempo (= Chiasien), Sokutsu – Banshoryo Distr. (= Chisan), Suisharyo) recently recorded with doubt from China: Fujian, Guandong (Kanaar, 2003: 225).

Specimens examined: Northeastern TAIWAN. Fushan Botanical Garden, 15-III-2006, from under bark, K. and S. Mazur leg., 1 ex., central TAIWAN. Lienhuachih, TFRI, 28-III-2006, from under bark, K. and S. Mazur leg., 3 ex.; NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 3 and 25, 1-II-2005, 2 ex., no. 20, 16-XI-2004, 1 ex. [CHSM, NTUC].

Distribution: Taiwan.

***Platysoma beybienkoi* Kryzhanovskij, 1972**

Specimens examined: REP. of CHINA, FORMOSA (TAIWAN), Paolai, 26-28-V-2002, Moravec P. leg., 1 ex. [CHSM].

Distribution: Described and recorded only from China (Yunnan). New to Taiwan.

***Platysoma rasile* Lewis, 1884**

Specimens examined: Central TAIWAN. NANTOU: Sun link Sea Forest, 4-IV-2006, from under bark, K. and S. Mazur leg, 2 ex. [CHSM].

Distribution: Known only from central and southern Japan, including Nansei Is. New to Taiwan.

***Niposoma taiwanum* (Hisamatsu, 1965) comb. nov.**

Syn: *Platysoma taiwanum* Hisamatsu, 1965

Previous records: Described and recorded from Taiwan only from 1 locality: "C. Formosa, Tattaka" (Hisamatsu, 1965: 134).

Specimens examined: Central TAIWAN. NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 25, 31-V-2005, 1 ex. [CHSM].

Distribution: Taiwan.

Note. Described originally in the subgenus *Eurylister* Bickhardt *(Platysoma)* but owing to the presence of the carinal striae [noted as absent in the original

description (Hisamatsu, 1965: 134)] and the position of the lateral pronotal stria, it should be transferred to the genus *Niposoma* Mazur (Mazur, 1999: 10).

***Kanaarister assamensis* (Lewis, 1900)**

Specimens examined: Central TAIWAN. Lienhuachih, TRFI., 28-III-2006, from under bark, K. and S. Mazur leg, 5 ex. [CHSM].

Distribution: India (Assam), Nepal, Thailand, Myanmar, China (Fujian), Malaysia, Indonesia (Sumatra, Borneo). New to Taiwan.

***Platylister (Popinus) unicus* (Bickhardt, 1912) comb. nov.**

Syn: *Platysoma unicum* Bickhardt, 1912
***Eblisia unicum* (Bickhardt, 1912)**

Previous records: Known from some localities in Taiwan: Chip Chip, Kosempo (= Chiasien) (Bickhardt, 1913: 170), Honbukei, Chiponkei, Kenting (Ôhara, 1986: 96), recorded also from the Ryukyu Archipelago (Chûjô, 1971: 6, Ôhara, 1986: 96).

Specimens examined: Central TAIWAN. NANTOU: NTU Exp. Forest, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 4, 29-VI-2004, 1 ex., no. 7, 17-V-2005, 1 ex., no. 14, 15, 30-IV-2005, 3 ex., no. no. 18, 17-X-2004, 1 ex., no. 19, 2-XI-2005, 1 ex., no. 23, 12-IV-2005, 1 ex. [CHSM, NTUC].

Note: Described originally in the genus *Platysoma* Leach (Bickhardt, 1912: 124) and later transferred to the genus *Eblisia* Lewis (Mazur, 1999: 3), but the form and position of the marginal stria of the prosternal lobe as well as the presence of the cariniform stria at the mesocoxa clearly show it should be classified in the genus *Platylister* Lewis (subgenus *Popinus* Mazur).

The genus *Eblisia* Lewis, 1889 and allied genera

Since the last statement (Mazur, 1990: 750), the genus *Eblisia* Lewis comprises a very heterogeneous complex of species previously belonging to the genera *Eblisia* Lewis, *Eurylister* Bickhardt, and *Chronus* Lewis. Although there is no doubt that all these genera are closely related (shape and position of the marginal stria of the prosternal lobe, and the absence of a mesocoxal carina), treating them as a single genus seems to be going too far. In particular, species of *Eurylister* markedly differ from those of *Eblisia* by the lateral pronotal stria lying very close to the margin and by the lateral metasternal stria being arcuate inwardly. Differences between *Eblisia* and *Chronus* are not great. Only 1 real character which might be regarded as differentiating *Eblisia* from *Chronus* is the foveate or sulcate pygidium in the former, whereas the pygidium of the latter is flat, and densely and minutely punctulate. Thus, this character may be used only to separate *Eblisia* and *Chronus* at most at a subgeneric level.

The genera *Eurylister* and *Eblisia* may be separated as follows:

1. Lateral pronotal stria lying close to margin (Fig. 12). Lateral metasternal stria arcuate inwardly, terminating at a point on a line with outer edge of metacoxa, so that its end is much closer to metepisternum than to inner edge of metacoxa (Fig. 13). Foretibia not modified. ---------- ---------- *Eurylister* Bickhardt.

-. Lateral pronotal stria distant from margin (Fig. 10). Lateral metasternal stria usually straight, terminating at a point about midway between inner edge of metacoxa and metepisternal suture (Fig. 11). Foretibia mostly enlarged and irregularly toothed. ------- ---------- *Eblisia* Lewis.

a) pygidium sulcate or foveate, sometimes very coarsely punctate.---------- ----------subgenus *Eblisia* Lewis.

b) pygidium covered with minute and dense punctulation.---------- ----------subgenus *Chronus* Lewis.

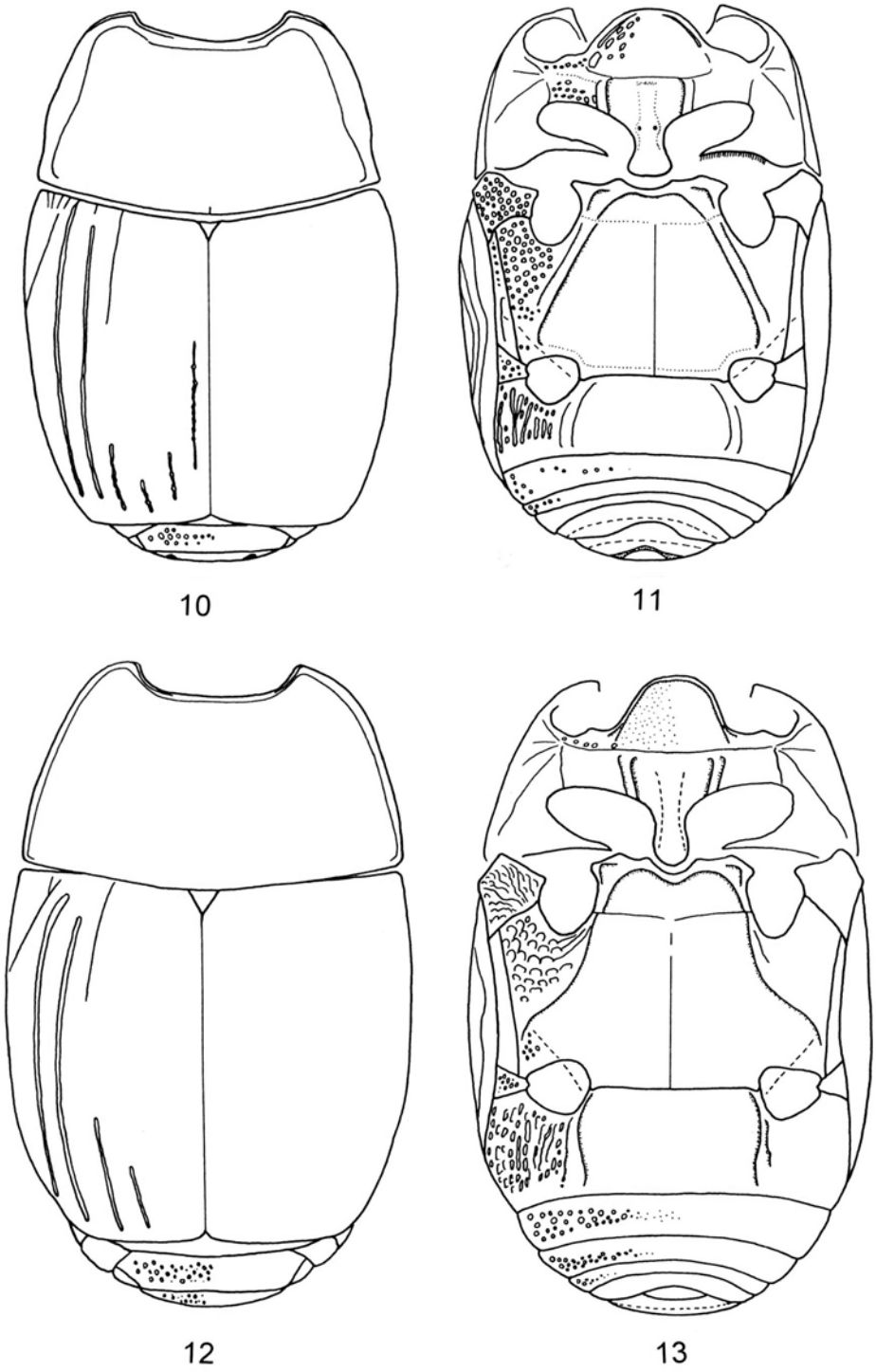


Fig. 10-13. (drawn by M. Ôhara). 10, 11, *Eblisia* sp.; 12, 13, *Eurylister* sp; 10, 12, upper side, 11, 13, under side.

***Eurylister silvestris* (Schmidt, 1893)**

Previous records: from Taiwan recorded only from Kosempo (= Chiasien) (Bickhardt, 1913: 170).

Specimens examined: TAIWAN. NANTOU: Hwy. 14, Fengnan, 700 m, 22-IV-1990, A. Smetana leg., 1 ex., NTU Exp. Forest, Ho-she Tract, 9-IV-2006, from under bark, K. and S. Mazur leg., 1 ex, Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 14, 9-VIII-2004, 1 ex., no. 19, 31-V-2005, 1 ex., Southwestern TAIWAN. KAOSHIUNG: Shanping Forest, 11-IV-2006, from under bark, K. and S. Mazur leg., 1ex. [CHSM, NTUC].

Distribution: Bhutan, Nepal, Vietnam, Malaysia, Indonesia (Sumatra), Taiwan.

***Eblisia (Eblisia) pagana* Lewis, 1902**

Previous records: Recorded only from 1 locality in Taiwan: Hoozan (= Fengshan, Kaohsiung Co.) (Bickhardt, 1913: 171).

Specimens examined: Central TAIWAN. NANTOU: Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 7, 26-VII and 9-VIII-2004, 2 ex., no. 8, 26-VII-2004, 1 ex., no. 14, 23-VIII-2004. 1 ex., no. 18 and 19, 9-VIII-2004, 2 ex. [CHSM, NTUC].

Distribution: Vietnam, Taiwan.

***Eblisia (Eblisia) pygmaea* (Bickhardt, 1913)**

Previous records: Recorded so far only from one locality in Taiwan: Hoozan (= Fengshan, Kaoshiung Co.) (Bickhardt, 1913: 171).

Specimens examined: TAIWAN: Puli – Yuchih, Sun Moon Lake, 29-V-13-VI-1993, J. Dalihod leg., 1 ex. [CHSM].

Distribution: Taiwan

***Epitoxus asiaticus* Vienna, 1986**

Specimens examined: Central TAIWAN. NANTOU: Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 23, 9-VIII-2004, 1 ex., Southern Taiwan, PINGTUNG: Nanrenshan, VIII-2001, W.-B. Hwang leg., 1 ex. [CHSM].
Distribution: Thailand. New to Taiwan.

***Anaglymma circularis* (Marseul, 1864)**

Previous records: Recorded from Taiwan only from Kotosho (Lewis, 1915: 56).

Specimens examined: TAIWAN. Fenchichu, IV-VI-1977, 1400 m, J. & S. Klapperich leg., 1 ex. [CHSM].

Distribution: Indonesia (Borneo, Sumatra), Vietnam, Taiwan.

***Margarinotus (Grammostethus) birmanus* Lundgren, 1991 (= *gentilis:* Lewis, 1892)**

Specimens examined: TAIWAN. TAIPEI: side of Hsintien River, 13-IV-2002, singled and swept, G. Fàbiàn and O. Merkl leg., 1♂; ILAN: Fushan Botanical Garden, 7-V-2004, C.-F. Lee leg, 1 ex. [CHSM].

Distribution: Myanmar. New to Taiwan.

***Parepierus lewisi* Bickhardt, 1913**

Previous records: Recorded so far only from Taihorin (Bickhardt, 1913: 174).

Specimens examined: Central TAIWAN. Lienhuachih, TFRI, 28-III-2006, from under bark, K. and S. Mazur, 1 ex., Southwestern Taiwan, KAOSHIUNG: Shanping Forest, 11-IV-2006, from under bark, K. and S. Mazur leg., 2 ex. [CHSM].

Distribution: Taiwan.

***Tribalus punctillatus* Bickhardt, 1913**

Described originally from Taiwan: Kosempo (= Chiasien) (Bickhardt, 1913: 174) and later erroneously recorded from Taninthāri (Tenasserim), Myanmar (Reichardt, 1932: 118), North (Desbordes, 1921: 11) and South India (Mazur, 1975: 440) as well as from Philippines (Mazur, 1997: 20).

Specimens examined: Northern TAIWAN. TAIPEI: Hsintien, 23-III-2006, from under bark, K. and S. Mazur leg., 3 ex. [CHSM], Fushan: TWFS – 30-III-2001, W.-B. Hwang, 1 ex., TWFS – MCPF, 27-VII-2001, W.-B. Hwang, 1 ex. [TFRIC], Central TAIWAN. NANTOU: Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 9, 31-V-

2005, 2 ex., Southern TAIWAN. PINGTUNG: Nanrenshan, IV-2002, W.-B. Hwang leg., 3 ex. [CHSM, NTUC].

***Haeterius optatus* Lewis, 1884**

Specimens examined: Central TAIWAN. NANTOU: Tungpu, 20-24-VII-1993, 1200 m, K. C. Chou and C. Y. Wong leg, 1 ex. [TARIC], Nei-mou-pu Tract, *Cunninghamia lanceolata,* pheromone trap, no. 7, 26-VII-2004, 1 ex. [CHSM].

Distribution: Known exclusively from Japan, where it exhibits a certain level of variability (Ôhara, 1994: 148). New to Taiwan.

General remarks about Taiwanese histerids

When looking at the last edition of the *Catalogue of Palaearctic Coleoptera* (Mazur, 2004: 68-102) one may find 74 species of the *Histeridae* known to occur in Taiwan. The records of some of them, however, are based on old data summarized by Miwa (1931) in his catalogue. This is true for *Anapleus cyclonotus* (Lewis, 1892), *Hister congener* Schmidt, 1885, *His. thibetanus* Marseul, 1857, *Hololepta indica* Erichson, 1834, *Niposoma lewisi* (Marseul, 1873), *Pachylister lutarius* (Erichson, 1834), *Platylomalus oceanitis* (Marseul, 1855), *Santalus orientalis* (Paykull, 1811), *Saprinus quadriguttatus* (Fabricius, 1798) and *Sap. semistriatus* (Scriba, 1790).

Ôhara (1999: 44, 46-47) in his revision of the Taiwanese *Histerini* and *Saprinus* species (2003: 37-38) questioned the occurrence of *Hister congener, His. thibetanus, Pachylister lutarius, Santalus orientalis, Saprinus quadriguttatus* and *Sap. semistriatus* because of the lack of credible new records.

Anapleus cyclonotus was recorded from Taiwan by Bickhardt (1913: 176) under the name *A. stigmaticus* (Schmidt, 1892) (synonymous at that time) but this record probably refers to an undescribed species or to a species recently described from Japan (Ôhara, 1994: 159, 161, 162).

The author has had the opportunity to examine many Taiwanese specimens of *Hololepta* and *Platylomalus,* finding none of them to be *Hololepta indica* or *Platylomalus oceanitis*.

The occurrence of *Niposoma lewisi* in Taiwan is doubtful because all of the specimens determined by the author were *Niposoma schenklingi* (Bickhardt).

Considering all these doubtful records and new records, the number of species of the Histeridae occurring in Taiwan may be raised to 93 (Table 1).

The characteristic feature of the Taiwanese histerids is the subcortical way of living. This manner is strictly related to the wealth of forest formations in Taiwan. The subcortical ecological group dominates among other histerids, containing 57% of all species known to occur in Taiwan.

The histerids of open land belong, as a rule, to genera of worldwide distribution such as *Saprinus* Erichson, *Hister* Linnaeus, *Atholus* Thomson, and *Chaetabraeus* Portevin.

The Oriental elements are one of the most numerous groups of histerids, comprising 31.2% of all species. The bulk of Oriental species is mainly constituted by species of the expansive Sundanian elements. Surprisingly, the influence of the geographically nearby Philippines seems to be of a little importance.

The species of the Mandshuric elements are also as numerous as those of the Oriental Region. These species probably immigrated through Japan and often live in Taiwan at higher elevations.

The Siamic elements, the third next-largest group (25.8%), originated in Indochina, particularly in northern Vietnam, not entering, as a rule, northeast China, being replaced there by the Sinopacific elements. Only two species (2.2%) might be classified as belonging to the last group: *Platysoma beybienkoi* and *Pla. chinense*. The Sinopacific elements extend their distribution to Yunnan Province

Table 1. An updated list of the *Histeridae* of Taiwan

No	Species	Type of distribution									S.c.
		O	P	H	Chi	M	S	rip	c	e	
1	*Niponius canalicollis* Lewis			+							+
2	*N. impressicollis* Lewis					+					+
3	*N. yamasakii* Miwa									+	+
4	*Chaetabraeus cohaeres* (Lewis)					+					
5	*Chaetabraeus paria* (Marseul)	+									
6	*Teretrius formosus* (Lewis)									+	+
7	*Acritus shirozui* Hisamatsu									+	
8	*A. tuberisternus* Cooman	+									+
9	*Bacanius mikado* (Lewis)					+					+
10	*B. niponicus* Lewis					+					+
11	*Abraeomorphus formosanus* (Hisamatsu)									+	+
12	*Gnathoncus rotundatus* (Kugelann)								+		
13	*Saprinus optabilis* Marseul	+									
14	*S. splendens* (Paykull)								+		
15	*Hypocaculus asticus* (Lewis)					+					
16	*Hypocaccus sinae* (Marseul)							+			
17	*Hypocaccus varians* (Schmidt)							+			
18	*Dendrophilus xavieri* Marseul					+					
19	*Coomanister scolyti* n.sp.									+	+
20	*Diplostix karenensis* (Lewis)						+				+
21	*Carcinops pumilio* (Erichson)								+		
22	*C. troglodytes* (Paykull)								+		+
23	*Pachylomalus musculus* (Marseul)	+									+
24	*Platylomalus mendicus* (Lewis)	+									+
25	*P. niponensis* (Lewis)					+					+
26	*P. sauteri* (Bickhardt)						+				+
27	*P. submetallicus* (Lewis)			+							+
28	*P. viaticus* (Lewis)					+					+
29	*Eulomalus lombokanus* Cooman	+									+
30	*E. pupulus* Cooman	+									+
31	*E. tardipes* (Lewis)	+?									+
32	*Paromalus vernalis* Lewis					+					+
33	*Trypeticus canalifrons* Bickhardt									+	+
34	*T. sauteri* Bickhardt									+?	+
35	*T. venator* Lewis					+					+
36	*Hololepta amurensis* Reitter					+					+
37	*H. depressa* Lewis					+					+
38	*H. higoniae* Lewis	+									+
39	*Silinus atratus* (Erichson)	+									+
40	*Apobletes schaumei* Marseul	+									+
41	*Platysoma beybienkoi* Kryzhanovskij				+						+
42	*P. celatum* Lewis					+					+
43	*P. chinense* Lewis				+						+
44	*P. lineicolle* Marseul					+					+
45	*P. rasile* Lewis					+					+
46	*P. takehikoi* Ôhara					+					+
47	*Niposoma schenklingi* (Bickhardt)									+	+

No	Species	Type of distribution									S.c.
		O	P	H	Chi	M	S	rip	c	e	
48	*N. taiwanum* (Hisamatsu)									+	+
49	*Kanaarister assamensis* (Lewis)			+							+
50	*Platylister cambodjensis* (Marseul)	+									+
51	*P. confucii* (Marseul)	+									+
52	*P. cribropygum* (Marseul)	+									+
53	*P. horni* (Bickhardt)	+				+					+
54	*P. pini* (Lewis)					+					+
55	*P. unicus* (Bickhardt)					+					+
56	*Eurylister satzumae* (Lewis)					+					+
57	*E. silvestris* (Schmidt)	+									+
58	*Eblisia pagana* Lewis						+				+
59	*E. pygmaea* (Bickhardt)									+	+
60	*E. sauteri* (Bickhardt)	+									+
61	*Eblisia sumatrana* (Bickhardt)	+									+
62	*Anaglymma circularis* (Marseul)	+									+
63	*Notodoma fungorum* Lewis	+									
64	*Epitous asiaticus* Vienna						+				
65	*E. bullatus* (Marseul)						+				
66	*Cypturus aenescens* Erichson	+									
67	*Margarinotus babai* Ôhara									+	
68	*M. birmanus* Lundgren						+				
69	*M. curvicollis* (Bickhardt)									+	
70	*M. formosanus* Ôhara									+	
71	*M. incognitus* (Marseul)			+							
72	*M. multidens* (Schmidt)	+									
73	*M. osawai* Ôhara									+	
74	*M. reichardti* Kryzhanovskij					+					
75	*Pachylister chinensis* (Quensel)	+									
76	*Hister javanicus* Paykull	+									
77	*Merohister jekeli* (Marseul)	+				+					
78	*Zabromorphus salebrosus subsolanus* Newton	+									
79	*Atholus coelestis* (Marseul)	+									
80	*A. depistor* (Marseul)					+					
81	*A. duodecimstriatus quatuordecimstriatus* (Gyllenhal)		+								
82	*A. philippinensis* (Marseul)	+									
83	*A. pirithous* (Marseul)	+				+					
84	*Asiaster calcator* Cooman									+	
85	*Epiechinus marseuli* Lewis	+									
86	*Onthophilus ostreatus* Lewis					+					
87	*O. smetanai* Mazur									+	
88	*Epierus sauteri* Bickhardt									+	+
89	*Parepierus lewisi* Bickhardt									+	+
90	*Tribalus colombius* Marseul	+									
91	*T. punctillatus* Bickhardt									+	+
92	*Eucurtiopsis mirabilis* Silvestri									+	
93	*Haeterius optatus* Lewis					+					

Legend: O, Oriental elements; P, Palearctic elements; H, Himalayan elements; Chi, Sinopacific elements; M, Mandshuric elements; S, Siamic elements; rip, coasts of East Asia; c, cosmopolitan and tropicopolitan; e, endemic; S.c, subcortical way of living.

southwestern China, but are mostly restricted to Southeast China.

The Himalayan elements differ from those of the Siamic ones by including the Himalayas, and their vertical distribution is limited to rather-high elevations. Of the Taiwanese histerids, four species (4.3%) may be treated as belonging to the Himalayan elements *(Niponius canalicollis, Platylomalus submetallicus, Kanaarister assamensis* and *Margarinotus incognitus)*.

Taiwan lies within the distributional limits of riparian species, settling the coasts of East Asia in the north to Sakhalin and extending south even as far as Australia that is why two species (2.2%): *Hypocaccus sinae* and *Hyp. varians,* may be found here.

Only one species may be taken as a true representative of the Palearctic element, *Atholus duodecimstriatus quatuordecimstriatus* (Gyllenhal, 1808) which is distributed from Northern and Central Europe (high elevations) through Siberia and Mongolia to China, Japan, and Taiwan.

The degree of endemism on Taiwan is relatively high (21.5%) so it is another example supporting the view of the island of Taiwan as a refugee and hot spot of evolution.

Acknowledgments

The author is deeply indebted to Dr. Chiun-Cheng Ko and Prof. Wen-Jer Wu (Department of Entomology, NTU), Dr. Chin-Ling Wang (TARI), Dr. Sheng-shan Lu (TFRI), and to Dr. Chi-Feng Lee (Research Center for Biodiversity, Academia Sinica) for the privilege of studying the rich materials of the Taiwanese histerids. Special thanks are due to Dr. Chiun- Cheng Ko for his kind help and excellent organization of the author's stay at NTU.

References

Bickhardt, H. 1912. Die Histeriden aus H. Sauters Formosaausbeute (11. Beitrag zur Kenntniss der Histeriden). Entomol. Bl. 8: 122-127.

Bickhardt, H. 1913. H. Sauter's Formosa Ausbeute. Histeridae II. (Col.) (16. Beitrag zur Kenntniss der Histeriden). Entomol. Mitt. 2: 166-177.

Chûjô, M. 1971. *Coleoptera* of the Loo-Choo Archipelago (III). Memoirs of the Faculty of Liberal Arts and Education, the Kagawa University, Japan, 2 (202), 55 pp.

Desbordes, H. 1921. Mission Guy Babault dans les provinces centrales de l'Inde et dans la région occidentale de l'Himalaya. 1914. Résultats scientifiques. Insectes Coléoptères. Histeridae. Imp. Lahure, Paris, 14 pp.

Hisamatsu, S. 1965. Some beetles from Formosa. Spec. Bull. Lep. Soc. 1: 130-140.

Kanaar, P. 2003. Revision of the genus *Trypeticus* Marseul (Coleoptera: Histeridae). Zool. Verh. 342, 318 pp.

Lewis, G. 1915. On new species of Histeridae and notices of others. Ann. Mag. Nat. Hist. (8) 16: 54-56.

Mazur, S. 1975. Contribution to the knowledge of the Histeridae from South India (Coleoptera). Rev. Suisse Zool. 82: 433-444.

Mazur, S. 1990. Notes on Oriental and Australian Histeridae (Coleoptera). Pol. Pismo Entomol. 59 (1989): 743-759.

Mazur, S. 1997. A world catalogue of the Histeridae. Genus, Suppl. 1997, 373 pp.

Mazur, S. 1999. Preliminary studies upon the Platysoma complex (Col. Histeridae). Ann. Warsaw Agric. Univ. SGGW, For. Wood Technol. 49: 3-29.

Mazur, S. 2004. Histeridae, pp. 68-102. *In*: I. Löbl and A. Smetana, eds. Catalogue of Palaearctic Coleoptera. Vol. 2. Stenstrup: Apollo Books.

Miwa, Y. 1931. Histeridae and Niponiidae. *In*: A Systematic Catalogue of Formosan Coleoptera. Department of Agriculture

Government Research Institute Formosa, Japan. Report no. 55: 49-58.

Ôhara, M. 1986. On the genus *Platysoma* from Japan (Coleoptera: Histeridae). Papers on Entomology Presented to Prof. Takehiko Nakane in Commemoration of His Retirement, Tokyo, p. 91-106.

Ôhara, M. 1994. A revision of the superfamily Histeroidea of Japan (Coleoptera). Ins. Matsum. 51 (new series): 1-283.

Ôhara, M. 1999. A revision of the Histerini (Coleoptera, Histeridae) in Taiwan. Ins. Matsum. 56 (new series): 3-50.

Ôhara, M. 2003. Notes on Taiwanese species of the genus *Saprinus* (Coleoptera, Histeridae), with redescription of *S. optabilis* and *S. splendens*. Ins. Matsum. 60 (new series): 31-41.

Reichardt, A. 1932. Liste des histérides, racoltés en 1930 à Ténasserim par le Dr. J.W. Helfer et conserves au Muséum National de Prague. Sborn. Entomol. Odd. Nar. Mus. Praha 10: 113-124.

Received: December 5, 2006
Accepted: February 26, 2007

台灣地區閻魔蟲科之種類組成與動物地理學的增述並兼述一新種

Slawomir Mazur* Department of Forest Protection and Ecology, Warsaw Agricultural University, Nowoursynowska 159, bld. 34, 02-776 Warszawa, Poland

摘　要

本研究調查台灣地區閻魔蟲種類，描述一新種 (*Coomanister scolyti*) 與 12 新記錄種。*Bacanius formosanus* 移至 *Abraeomorphus* 屬，而 *Eblisia unicum* 移至 *Platylister* 屬。*Eurylister* 屬則已經由 *Eblisia* 屬獨立出來。同時列出台灣地區閻魔蟲名錄，並探討其分佈特色。

關鍵詞：閻魔蟲科、台灣、新種、*Eblisia*、分佈。

*論文聯繫人
e-mail: Slawomir.Mazur@wl.sggw.pl