

PSEPHENIDAE:

I. Notes on the East Asian species of *Ectopria* LeCONTE (Coleoptera)

C.-F. LEE, P.-S. YANG & M. SATÔ

Abstract

Two new species and one new subspecies of *Ectopria* LeCONTE (Coleoptera: Psephenidae: Eubriinae) are described from China and Japan: *E. chikuni* sp.n. (Anhui), *E. lobata* sp.n. (Sichuan), and *E. opaca tomokuni* ssp.n. (Tokunoshima Island). *Ectopria* is recorded from Mainland China for the first time. New faunistic data are provided for *Ectopria hsui* LEE & YANG, *E. opaca opaca* (KIESENWETTER) and *Ectopria tachikawai* (SATÔ).

Key words: Coleoptera, Psephenidae, Eubriinae, *Ectopria*, new species, taxonomy, China, Japan.

Introduction

Ectopria LeCONTE belongs to Eubrianacinae. Only one species was recorded from China (Taiwan) by LEE & JÄCH (1995). The genus is so far known from East Asia (Japan, Taiwan) and the New World. The East Asian species were revised taxonomically by LEE & YANG (1993). In this paper, *Ectopria* is recorded for the first time from Mainland China, two new species and one new subspecies from China and Japan and new faunistic data are provided.

Acronyms & CWBS localities:

ANIC Australian National Insect Collection, Canberra

BAU Beijing Agricultural University

CASS Chinese Academy of Sciences, Institute of Applied Ecology, Shenyang

CWBS China Water Beetle Survey

NMW Naturhistorisches Museum, Wien

NTU National Taiwan University

CWBS loc. 228: **Sichuan Province**; Yaan City Region; Baoxing County; ca. 5 km SW Baoxing City, 4 km N Shuangshi [= Twin Stones]; river (Xichuan He), ca. 5 m wide, with pebbles and cobbles, cold, fast flowing through forest, ca. 900 m a.s.l.; 11.VI.1996; leg. Ji & Wang.

CWBS loc. 231: **Sichuan Province**; Yaan City Region; Tianquan County; Xingou [= New Gorge] Village; ca. 57 km W Yaan City, 6 km SW Zishi village; Tianquan He [= Sky Spring River], ca. 6 - 8 m wide, cold and fast flowing, with gravel and cobbles, slightly polluted, cultivated forest on valley slopes, ca. 1500 m a.s.l.; 12.VI.1996; leg. Ji & Wang.

Ectopria chikuni sp.n.

Type Material: **Holotype** ♂ (BAU): "CHINA: Anhui, Chihuashan, 22.V.1989, leg. Yang". **Paratype**: ♀, same locality data as holotype (BAU).

Male: Length 3.0 mm, width 1.9 mm. Coloration blackish brown. Antenna (Fig. 6) serrate from segments 3 - 10; segments 3 and 4 moderately serrate, segments 5 - 10 strongly serrate. Maxillary

palpus (Fig. 2) slender; terminal segments apically dilated, apex irregularly sinuate, relative lengths of segments 2 - 4 about 2.4 : 1 : 1.7. Labial palpus (Fig. 3) short, 0.50 times as long as maxillary palpus, terminal segment similar to that of maxillary palpus, relative lengths of segments 2 - 3 about 1.0 : 1.0. WP/LP = 2.24. LE/WE = 1.24. WP/WE = 0.79.

Aedeagus (Fig. 4): 0.7 mm long, oblong, widest at middle, 2.2 times as long as wide. Median lobe 0.7 times total length of aedeagus, tapering apically, apex narrowly rounded. Fibula 0.3 times total length of aedeagus, V-shaped; 1.7 times as long as wide. Sulcus between parameres and basal piece visible. Mesal margins of parameres sinuate. A small sclerite visible at middle of base of fibula.

Female: Length 3.3 mm, width 2.4 mm. Similar to male, but antenna weakly serrate (Fig. 5). WP/LP = 2.31. LE/WE = 1.12. WP/WE = 0.70.

Remarks: *Ectopria chikuni* resembles *E. opaca* in color, and is similar to *E. hsui* LEE & YANG in the male antennae and aedeagus. *Ectopria hsui* differs by its longer female antennae, oblong male aedeagus, with visible dorsal margin between parameres and basal piece, and irregularly sinuate apices of maxillary and labial palpi.

Etymology: The species is dedicated to the collector, Chikun Yang.

Ectopria lobata sp.n.

Type Material: **Holotype** ♂ (CASS): "CHINA: Sichuan, 11.6.1996 N Ya'an, Baoxing County ca. 5 km SW Baoxing, 900m leg. Ji & Wang (CWBS 228)". **Paratypes** (NMW, NTU): 2 ♂ ♂: "CHINA: Sichuan, 12.6.1996 W Ya'an, 6 km SW Zishi Xingou Village, 1500m leg. Ji & Wang (CWBS 231)".

Male: Habitus as in Fig. 1. Length 3.8 mm, width 2.3 mm. Coloration blackish brown; antenna, pro- and mesothoracic legs yellowish brown; antenna yellowish brown, antenomer 3 - 5 progressively darkened, 6 - 10 dark brown; femora and tarsi darkened. Antennae (Fig. 10) serrate from segments 3 - 10; segments 3 - 5 wider. Labrum strongly arcuate. Maxillary palpus (Fig. 7) slender, terminal segment apically dilated; apex obliquely truncate, irregularly toothed; relative lengths of segments 2 - 4 about 2.8 : 1 : 2.2. Labial palpus (Fig. 8) small, about 0.5 times as long as maxillary palpus; terminal segment similar to that of maxillary palpus, relative lengths of segments 2 - 3 about 1.0 : 1.4. Tarsi strongly lobate. WP/LP = 1.92. LE/WE = 1.26. WP/WE = 0.78.

Aedeagus (Fig. 9): 1.2 mm long, elongate, narrowed at apical 1/3, subparallel from middle to basal 1/4; 2.7 times as long as wide. Penis 0.7 times total length of aedeagus; tapering apically and basally from apical 1/3; apex narrowly rounded. Fibula 0.3 times total length of aedeagus; Y-shaped; 3.3 times as long as wide. Sulcus between parameres and basal piece invisible. Mesal margins of parameres near apex acutely toothed, at middle deeply and acutely notched (>3/4 width). A small sclerite visible at middle of base of fibula.

Remarks: This new species is easy to distinguish from other species by its elongate aedeagus and the strongly lobate tarsi.

Etymology: The name refers to its lobate tarsi.

Ectopria opaca opaca (KIESENWETTER)

Specimens Examined: JAPAN: 2 ♂ ♂, Tsushima: Mt. Ohboshi-yama, 21.V.1981, leg. Y. Hori & K. Ishida (NTU); 5 exs., same date and collectors as precedings, Mt. Mitake (WUN); 1 ex., Sago, Tsushima Is., 8.VI.1968, leg. Y. Kurosawa (WUN); 1 ex., Nita, leg. Y. Kurosawa (WUN); 1 ex., Nita, Kaidokoro, Tsushima Is., 8.VI.1968, leg. Y. Kurosawa (WUN).

Note: This is the first record of this subspecies from Tsushima Island.



Fig. 1: Habitus of *Ectopria lobata*.

Ectopria opaca tomokunii ssp.n.

Type Material: **Holotype** ♂ (WUN): "Mikyo Tokunoshima I., 10.IV.1968 M. Tomokuni". **Paratypes**: 20 exs., same locality and date as holotype (WUN); 4 exs., same locality as holotype, 9.-10.IV.1968, leg. K. Ioki (NTU, NMW); 3 exs., Hatsuno, Amami-Oshima, 13.IV.1971, leg. M. Sakai (NTU).

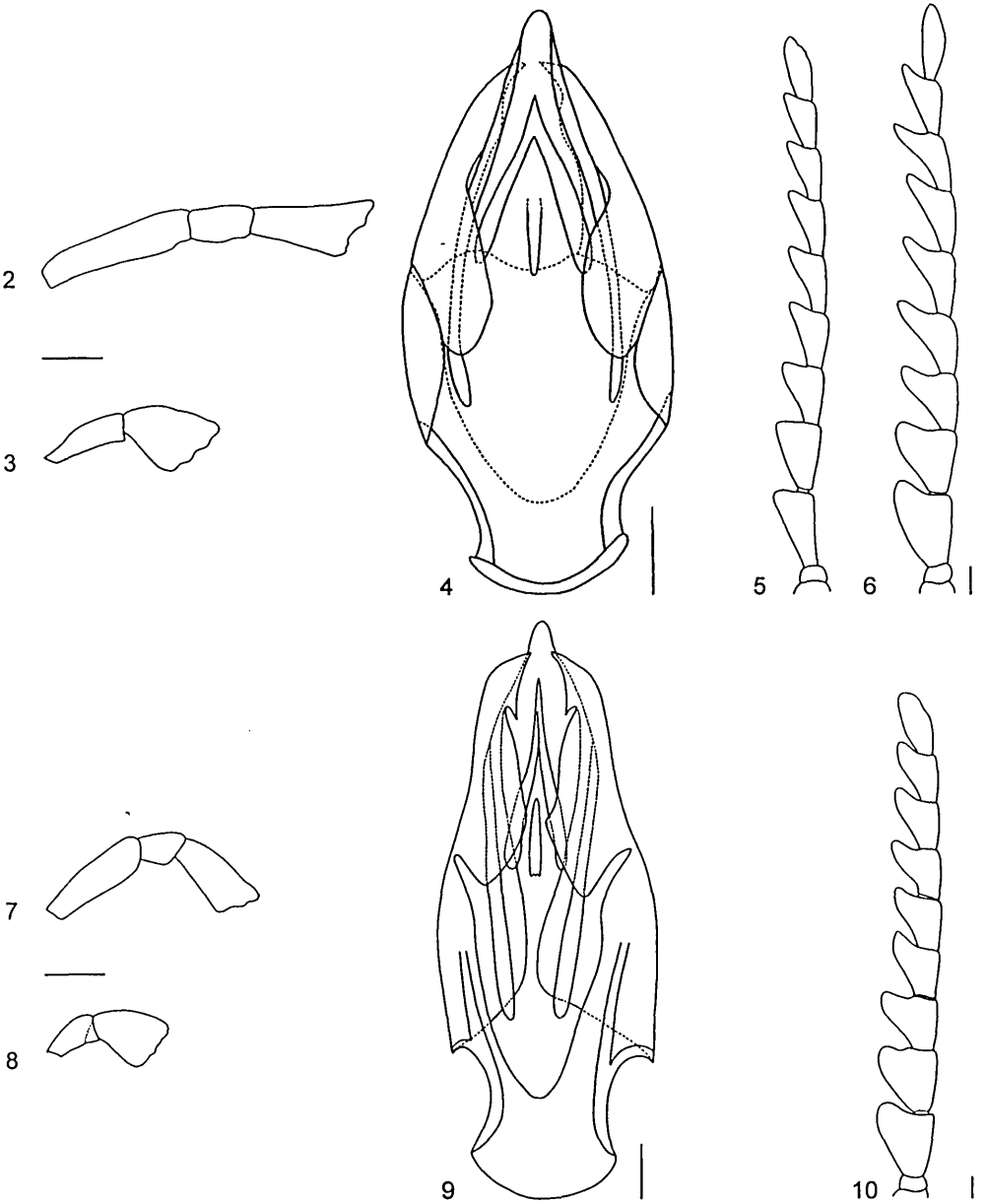
Remarks: This subspecies differs from the nominate form by its brown elytra and yellowish brown legs, and less prominent baso-lateral processes of basal piece.

Etymology. This species is named for the collector.

Ectopria tachikawai (SATÔ)

Specimens Examined: JAPAN: IRIOMOTE: 8 exs., Nishifunatsuki-gawa, 18.VII.1996, leg. M.-L. Jeng (NTU); 4 exs., Taisho-ike, 18.VII.1996, leg. C.-F. Lee (NMW).

Note: This is the first record of this species from Iriomote Island.



Figs. 2 - 6: *Ectopria chikuni*, 2) maxillary palpus, 3) labial palpus, 4) aedeagus, dorsal aspect, 5) female antenna, 6) male antenna. Scale = 0.1 mm.

Figs. 7 - 10: *Ectopria lobata*, 7) maxillary palpus, 8) labial palpus, 9) aedeagus, ventral aspect, 10) male antenna. Scale = 0.1 mm.

***Ectopria hsui* LEE & YANG**

Specimens Examined: TAIWAN: 5 exs., Taitung, Luta Island, 27.III.1998, leg. C.-F. Lee (NTU, NMW); 4 exs., same locality and date, leg. Sakai (NTU, ANIC).

Note: These specimens differ slightly in coloration from the type specimens, but the aedeagus agrees fairly well.

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