Three new species of the genus *Eupoa* from China (Araneae : Salticidae)

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ABSTRACT

Three new species of the genus *Eupoa* are described from China. They are *Eupoa* hainanensis sp. nov., *Eupoa* maculata sp. nov. and *Eupoa* yunnanensis. sp. nov. Diagnoses, distribution data, figures of body and genital organ are given to each species.

Key words: Araneae, Salticidae, Eupoa, new species, China

INTRODUCTION

Salticidae is the largest family of the order Araneae, but *Eupoa* is the small and raritical genus of Salticidae (Araneae). Zabka (1985) has been reported this genus for the first time. About 5000 species of Salticidae have been reported in the world (1990, Proszynski), and *Eupoa* not reported in Korea yet. We found out three new species of genus *Eupoa* among specimens collected from 3 localities (Hainan, Jianfengling, Yunnan) in China from April to December 1994, and describe these with illustrations in this paper.

The type specimens of the new species are deposited at Department of Biology, Hebei Normal University. Measurement is in millimeters.

DESCRIPTION

Eupoa hainanensis sp. nov. 해난깡충거미 (신청) (Figs. 1A-C)

Type Specimen. 1 & (holotype), Jianfengling, Ledong County, Hainan Province, Dec. 1993, leg.

Liao Cong-Hui.

Description.

Female: Carapace (Fig. 1A) brown with black margin, light brown in median area of eye field and posterior part of carapace, hairs brown or white; surroundings of eyes black and connected, ALE and PLE bigger than usual, PME slightly behind the midpoint between ALE and PLE; carapace suboblong, plain anteriorly and abruptly inclined posteriorly. Sternum oval, light brown with hairs. Clypeus brown with hairs, anterior margin black, its height less than diameter of AME. Chelicera brown with darker base. Endite and labium brown, their distal ends lightly colored with dense hairs. Palp greyish black with light brown tarsi. Leg brown, with spines, annuli greyish black, distal two segments without clear annulus.

Abdomen (Fig. 1A): dorsum greyish black, patterns light brown, anterior two pairs larger, posterior one small and triangular; ventrally light brown with black lateral areas. Spinnerets light brown.

Male unknown.

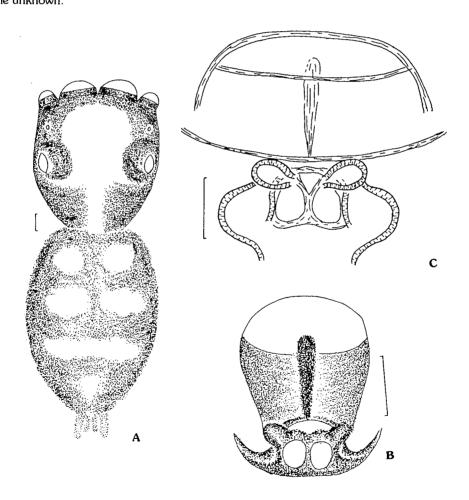


Fig. 1. Eupoa hainanensis sp. nov.: A, body; B, epigynum; C, vulva.

Measurements. Female (holotype): Total length 2.00; carapace 1.00×0.90 ; abdomen 1.10×0.90 ; anterier eye row width (AEW) 0.85; posterior eye row width (PEW) 0.80; eye field length (EFL) 0.60; leg [1.80 (0.65, 0.60, 0.35, 0.20); leg [1.40 (0.50, 0.40, 0.30, 0.20); leg [1.30 (0.40, 0.40, 0.30, 0.20); leg [2.20 (0.70, 0.80, 0.40, 0.30); formula 4,1,3,2.

Diagnosis. Body form and patterns are similar to those of *Eupoa prima* Zabka, 1985 (Zabka, 1985 : 288-289, figs. 165-169), but differs in : 1. epigynum (Fig. 1B) with a bar-shaped sclerotized structure in middle, atrium wide oval; 2. spermatheca (Fig. 1C) spherical, canals shorter and bigger.

Distribution. China (Hainan)

Etymology. The scientific name is derived from its type locality, Hainan province.

Eupoa maculata sp. nov. 흰무늬깡충거미(신칭) (Figs. 2A-C)

Type Specimen. 14 (holotype), Jianfengling, Ledong County, Hainan Province, March 1994, leg. Liao Cong-Hui; 14 (paratype), Jianfengling, Ledong County, Hainan Province, August 1993, leg. Liao Cong-Hui.

Description.

Female: Carapace brown with dark margin, covered with white and brown hairs, median area of eye field and posterior part of carapace light brown; carapace suboblong, plain anteriorly and abruptly inclined posteriorly; ALE and PLE bigger than usual, PME behind the midpoint between ALE and PLE; surroundings of eyes black and connected, two black marks in eye field(Fig. 2A). Sternum cordiform, light brown with short brown hairs. Clypeus brown with black anterior margin, hairs dark brown, height of clypeus less than diameter of AME. Chelicera, endite and labium light brown with hairs. Palp greyish black with light brown tarsi. Legs light brown, with strong spines, greyish black annuli on each segment, but inclear on distal two segments.

Abdomen (Fig. 2A) light brown, anterior margin with long brown hairs; dorsum greyish black, patterns light brown, anterior pair ones subtriagular median one suboblong, the third one longest, posterior one small triangular ventral and spinnerets light brown, no pattern.

Male unknown.

Measurements. Female(holotype): Total length 2.00; carapace 1.00×0.90 ; abdomen 1.00×0.80 ; AEW 0.85, PEW 0.80, EFL 0.60; Leg I lost; Leg I 1.50 (0.50, 0.50, 0.25, 0.25); leg II 1.40 (0.40, 0.50, 0.30, 0.20); leg IV 2.30 (0.80, 0.80, 0.40, 0.30)

Diagnosis: The body form of the new species is similar to that of *Eupoa prima* Zabka, 1985 (Zebka, 1985 : 288-289, figs. 165-169). but differs in 1. epigynum (Fig. 2B) with a bar-shaped sclerotized structure, atrium wide oval, copulatory opening invisible which is circular in that of the latter; 2. the course of copulatory canal (Fig. 2C) also different. the new species also similar to *Eupoa hainanensis* sp. nov., but differs in 1. copulatory opening invisible which is clear in that of the latter (Figs. 1B, 2B); 2. copulatory canal much longer and above the spermatheca which is must shorter and under spermatheca (Figs. 1C, 2C) in the latter.

Distribution: China (Hainan).

Etymology: Body of the new species with clear and special patterns. Here comes the present scientific name. The Latin *macul* means "makings" in English.

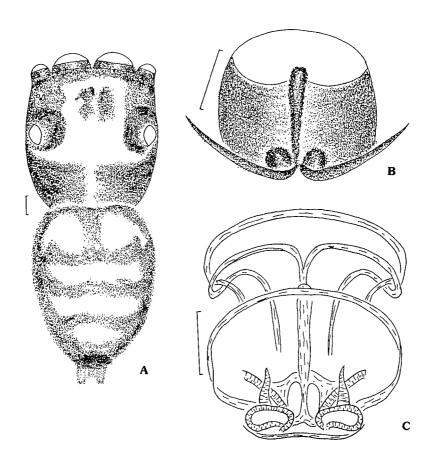


Fig. 2. Eupoa maculata sp. nov.: A, body; B, epigynum; C, vulva.

Eupoa yunnanensis sp. nov. 윤난강충거미 (신청) (Figs. 3A-C)
Type Specimen. 1 (holotype), Mengla County, Yunnan Province, April 1993, leg. Li Chao-Da. Description.

Male: Carapace suboblong, Plain anteriorly and abruptly inclined posteriorly; brown with black margin; hairs white or brown, median area of eye field and posterior part of carapace light brown; ALE and PLE bigger than usual; PME slightly behind the midpoint between ALE and PLE; surroundings of eyes black and connected. Sternum cordi-form with brown hairs; brown with darker margin. Clypeus brown with black frontal margin; hairs white; height less than diameter of AME. Chelicera, endite and labium light brown. Palp greyish black with white hairs. Leg light brown, spines strong, each segment (except distal two ones) with greyish black annuli and longitudinal striae.

Abdomen oval; dorsum dark brown, hairs white; each side with a light yellow longitudinal band; Pattern as shown in fig. 3A; ventrally light yellow, lateral areas and posterior margin greyish black. Spinneret black.

Female unknown.

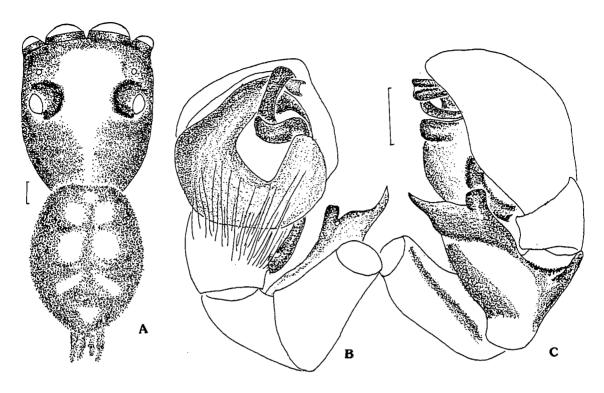


Fig. 3. Eupoa yunnanensis sp. nov. : A, body; B, mesal palp organ; C, retromarginal palp organ.

Measurement. Male (holotype): Total length 1.80; carapace 0.90×0.80 ; abdomen 0.90×0.60 ; AEW 0.80; PEW o.75; EFL 0.55; leg I 1.55 (0.50, 0.50, 0.25, 0.30); leg I 1.35 (0.40, 0.45, 0.25, 0.25); leg II 1.45 (0.45, 0.45, 0.25, 0.30); leg IV 1.90 (0.70, 0.60, 0.30, 0.30); formula 4,1,3,2.

Diagnosis: The new species resembles *Eupoa prima* Zabka, 1985 (Zabka, 1985: 287-288, figs. 161-165), but differs in: 1. apophyses on patella, tibiae, bulb surface much fewer; 2. tegulum U-shaped in mesal view (Fig. 3B); 3. patellal apophyses shorter and larger; 3. abdominal pattern also different.

Distribution: China (Yunnan).

Etymology: The scientific name is derived from type locality, Yunnan Province.

REFERENCE

Prószynski, J., 1990, Catalogue of Salticidae (Araneae)

Zabka, M., 1985, Systematic and Zoogeographic study on the family Salticidae (Araneae) from Viet -Nam, Ann. Zool., **39**(11): 220-221, 287-289, figs. 161-169.

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중국산 Eupoa속(거미목: 깡충거미과)의 3신종

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요 약

중국 호남성지역에서 채집한 깡충거미과의 Eupoa속 3신종, Eupoa hainanensis sp. nov. 해난깡충거미, Eupoa maculata sp. nov. 흰무늬깡충거미, 그리고 Eupoa yunnanensis sp. nov. 윤난깡충거미를 기재 보고한다.