# On the genus *Megalotomus* Fieber from China (Heteroptera: Alydidae)

G. Q. Liu & Q. Liu

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Abstract: Megalotomus acutulus spec. nov. is described from China and M. costalis is recorded for the first time from this country.

G. Q. Liu, Department of Biology, Nankai University, Tianjin 300071, P. R. China.

Q. Liu, Normal University, Huhehot, Inner Mongolia, P. R. China.

### Introduction

Megalotomus Fieber is a small genus in the Alydidae. At present, eleven species are known worldwide, four of which were recorded from China: M. castaneus Reuter, M. junceus (Scopoli), M. ornaticeps (Stål) and M. zaitzevi Kerzhner (Kerzhner, 1972; Hsiao et al., 1977; Nonnaizab et al., 1988). In the present paper Megalotomus acutulus spec. nov. is described and M. costalis Stål is recorded for the first time from China.

# *Megalotomus acutulus* spec. nov. (figs 1-6, 13-16)

Type material

Holotype: &, China, Inner Mongolia, Hailar (49.2°N/119.7°E), 9.viii.1981, leg. H. G. Zou. Paratypes: 2&, 1\, \text{\$\phi\$}, same locality as holotype, 2-8.viii.1981; 1\, \text{\$\phi\$}, Inner Mongolia, Ewenki (49.8°N/20.1°E), 3.viii.1981; 2\, \text{\$\phi\$}, same locality, 22. vii. 1988; 1\, \text{\$\phi\$}, same locality, 2.viii.1987, leg. L. Y. Zheng; 2\, \text{\$\phi\$}, Inner Mongolia, Alihe (0.6°N/123.6°E), 12 and 15.viii.1981, leg. S. Z. Ren & H. G. Zou; 1\, \text{\$\phi\$}, Inner Mongolia, Chifeng (42.2° N/18.9°E), 27.vii.1984; 1\, \text{\$\phi\$}, Hebei Province, 1984, leg. L. Y. Zheng. All specimens are deposited in the collection of the Department of Biology of the Nankai University, Tianjin, China.

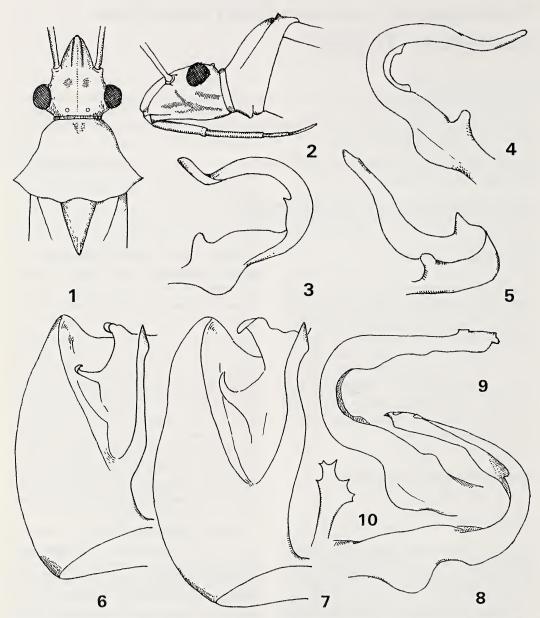
## Description

Body brown to blackish brown, rather slender, covered with short pale hairs and black punctures.

Head triangular, slightly shorter than wide (fig. 1), moderately shining, rugose, and covered with pale hairs. Head black, with two yellowish brown maculae between the eyes, median and lateral lobe yellowish brown, and lateral side black with yellowish brown stripes (fig. 2), which sometimes are obscure; anterior margin of bucculae yellowish brown; anteclypeus yellowish brown; rostrum reddish brown to blackish brown; eyes brown, ocellae red; antennal segments I-III yellowish brown with blackish brown apex, segment IV blackish brown. Length of antennal segment I equal in length to segment II and III, segment IV thicker than segment I-III. Rostrum reaching middle coxae, segment I not reaching anterior margin of prosternum (fig. 2).

Pronotum yellowish brown with a blackish brown collar, campanulate, wider than long, calli without punctures, lateral margins slightly concave, humeral angles prominent and slightly raised. Scutellum reddish brown to yellowish brown, lateral margins black, apex yellow brown. Prothorax with black punctures. Hemelytra yellowish brown, anterior margin light yellow, or concolorous with hemelytra. Costa of fore wing slightly concave. Femora brown to reddish brown, mottled, tibia yellowish brown with base and apex brownish black. Legs covered with short small hairs, hind femora thick, with 4-5 spines and a small tooth between apex and first spine.

Abdomen constricted at base, with ventral side reddish brown, mottled.

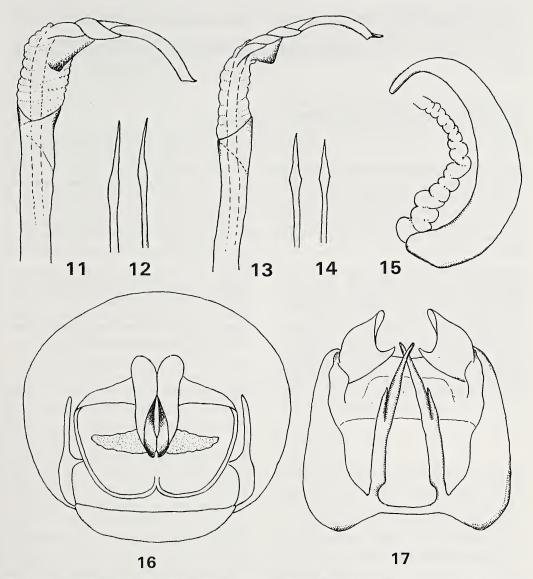


Figs 1-10. *Megalotomus acutulus* spec. nov. and *M. ornaticeps* Stål. 1-6, *M. acutulus*. 1, dorsal view of head and pronotum; 2, lateral view of head and prothorax; 3-5, parameres from different angles; 6, dorsal view of pygophore. 7-10, *M. ornaticeps*. 7, pygophore, dorsal view; 8-9, parameres; 10, paramere, apical part.

Male genitalia. Pygophore with a pair of surcapsular spines arising at middle of dorsal margin, directing posterad, extending to hind margin of pygophore (fig. 6). Parameres slender (figs 3-5). The form of vesica is depicted in figure 13. There are two well sclerotized, elongate and slender conjunctival

spicules, which are free in most part and seem to be attached on the conjunctiva only with their basal apex (fig. 14). Dorsal view of female genitalia (with tergum removed) as in figure 16. Spermatheca curvate (fig. 15).

Measurements. Body length: 12.8-13.6 mm. Head length: 1.9-2.3 mm; head width (in-



Figs 11-17. *Megalotomus* sp. 11-12, *M. ornaticeps*. 11,  $\delta$ , vesica; 12, apices of conjunctival spicules. 13-16, *M. acutulus* spec. nov. 13,  $\delta$ , vesica; 14, apices of conjunctival spicules; 15,  $\varphi$ , spermatheca; 16,  $\varphi$ , dorsal view of end of abdomen (tergum removed). 17, *M. costalis*, dorsal view of pygophore.

cluding eyes): 2.1-2.4 mm; length of rostrum: 4.3-4.8 mm; length of antennal segments I-IV: 1.7, 1.7, 1.7 and 3.3 mm. Pronotum length: 2.1-2.5 mm; width of pronotum: 1.9 mm at anterior angles and 3.1-3.5 mm at humeral angles; length of scutellum: 1.3 mm; width of scutellum: 1.0 mm. Corium length: 7.0 mm; membrane length: 6.5 mm.

# Remarks

Megalotomus acutulus spec. nov. is close to Megalotomus ornaticeps (Stål), but smaller in size, with different dorsal views of pygophore and female genitalia (figs. 7) and more slender parameres than those of *M. ornaticeps* (figs 8-9). In *M. ornaticeps*, the parameres are broad at apex (fig. 10) and the vesica (fig. 11) is slightly thicker. The apices of the conjunctival

spicules of *Megalotomus acutulus* spec. nov. are rhomboid (fig. 14), whereas in *M. ornaticeps* they are narrower and with rounded sides (fig. 12).

# Megalotomus costalis Stål new for China

#### Material

China, Heilongjiang Province, Maoershan (45.2°N/127.5°E), 4.ix.1973, 2\$\delta\$ and Mudanjiang (44.5°N/129.6°E), 3.viii.1980, leg. L. Y. Zheng, 1\$\delta\$. China, Shandong Province, Tai Shan (36.4°N/117.2°E), 26.vi.1955, 1\$\delta\$. All specimens are deposited in the collection of the Department of Biology of the Nankai University, Tianjin, China.

Megalotomus costalis thus far was only known from Korea and Japan (Hokkaido) (Miyamoto & Yasunaga, 1989; Lee & Miyamoto, 1993). In the collection of the Nankai University, however, we found four males of this species collected in China. The species can easily be recognised by the morphology of the pygophore (fig. 17).

# Acknowledgements

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### References

HSIAO, T. Y., S. Z. REN, L. Y. ZHENG, H. L. JING & S. L. LIU, 1977. A handbook for the determination of the Chinese Hemiptera: Heteroptera I: i-iii, 1-330. Science Press, Beijing [in Chinese, English summary].

KERZHNER, I. M., 1972. New and little-known Heteroptera from Mongolia and from adjacent regions of the USSR. I. – *Nasekom. mong.* 1: 349-352 [in Russian].

LEE, C. E., Y. I. KWON & S. MIYAMOTO, 1993. A check list of Heteroptera from Chejudo. – *Nature and Life* 23: 1-56.

MIYAMOTO, S. & T. YASUNAGA, 1989. Hemiptera, Heteroptera. In: *A check list of Japanese insects* (Y. Hirashima ed.) 1: 151-188 [in Japanese].

NONNAIZAB, 1988. Heteroptera. In: *Fauna of Inner Mongolia (B)* 1: 1-470. The Press of Inner Mongolia, Huhehot [in Chinese, English summary].

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