The genus *Macroscytus* Fieber (Heteroptera: Cydnidae) in the East Palaearctic subregion

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Abstract: The nomenclature of the East Palaearctic species of the genus *Macroscytus* is clarified. *Macroscytus japonensis* Scott appeared to consist of two different taxa: the genuine *M. japonensis* and *M. confusus* spec. nov. from Japan and China. Six species of the genus are recorded to occur on the territory of China, namely two native Palaearctic species, *M. japonensis* and *M. confusus*, and four of Oriental origin, *M. aequalis*, *M. dominiqueae*, *M. popovi*, and *M. sumatranus*.

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Introduction

The nomenclature of the genus *Macroscytus* Fieber has always been problematic in the East Palaearctic (see Hsiao et al., 1977; Josifov & Kerzhner, 1978), especially because the number of its representatives occurring in the territory of China was never exactly established.

Hsiao et al. (1977) treated all the previous records of the genus *Macroscytus* from China (*M. brunneus* (Fabricius), *M. badius* (Walker), *M. japonensis* Scott, *M. transversus* (Burmeister), and *M. fraterculus* Horváth) as pertaining to one species, *M. subaeneus* (Dallas), and *M. japonensis* was treated as a synonym of the latter.

Josifov & Kerzhner (1978) suggested that, as was already shown by Horváth (1919), the East Palaearctic representative of the genus *Macroscytus* is not conspecific with *M. subaeneus,* and that *M. japonensis* is the proper name for it. The latter species was recorded from the Far East territory of Russia, Korea, Japan, China (Beijing, Shensi, Sichuan) and North Vietnam (Josifov & Kerzhner, 1978; Kanyukova, 1988). On the other hand Josifov & Kerzhner (1978) erroneously treated *M. javanus* Mayr as a synonym of *M. subaeneus.* The description and figures of the latter species in the mentioned paper concerned de facto *M. javanus* (*M. subaeneus*, as it was recently shown by Lis (1994), is a very rare Oriental species). Josifov & Kerzhner (1978) also examined a male from South China (Fujian) representing the second species of the genus from this territory, and identified it as *M. foveolus* (Dallas). Unfortunately it was a misidentification and *Macroscytus aequalis* (Walker) is the proper name for the species.

Recently in a revision of the Oriental burrower bugs Lis (1994) showed that at least five species of the genus *Macroscytus* occur in the territory of China: *M. japonensis*, known from Beijing, Fujian, Gansu, Guangdong, Guizhou, Henan, Shangdong, Shanghai, Sichuan, Zhejiang and Taiwan; *M. aequalis*, known from Yunnan, Guangdong and Fujian; *M. dominiqueae* Lis, known only from Yunnan; *M. popovi* Lis, known from Fujian; and *M. sumatranus* Lis, known from Guangxi. The first of these species is Palaearctic, and the last four are Oriental.

Further study showed that *M. japonensis* is a composite species consisting of two separate taxa: the genuine *M. japonensis* and a second species differing in shape of the male genitalia and in body size. Since the female lectotype of *M. niponensis* Signoret (see Lis, 1994) and the male lectotype of *M. fraterculus* (see Josifov & Kerzhner, 1978) both are conspecific with the lectotype of *M. japonensis* Scott, it was necessary to establish a new species (described below) for the second taxon.

Macroscytus confusus spec. nov.
(figs 1-4)

Macroscytus japonensis non Scott [partim]: Scott, 1874: 294 [paralectotype]; Josifov & Kerzhner, 1978: 189.

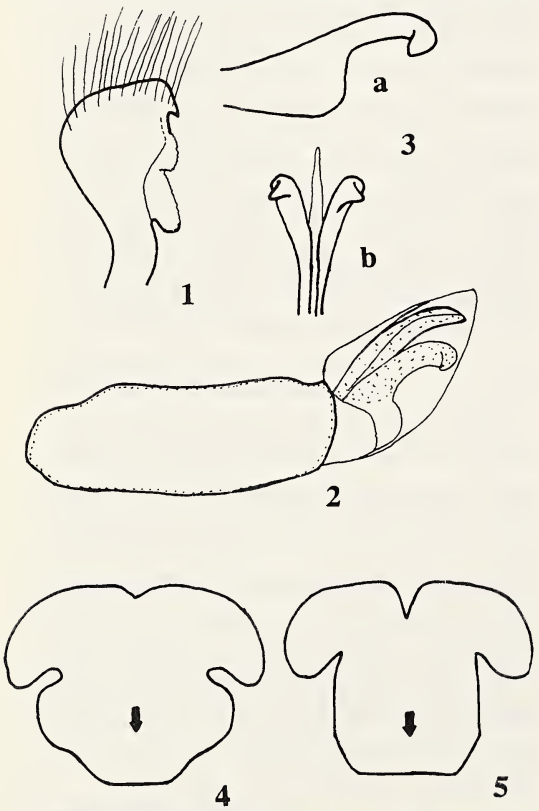
Material

Holotype, ♂ : Japan, Honshu, Kanagawa pref., Hayama, 10.ix.1986, Takasu Masaka. Paratypes: 1 ♂, 2 ♀: Japan, Honshu, Osaka, Rokkusan, v-vi.97, T. Lenz ded., 10.ix.97; 1 ♂: Japan, Paratype, Scott Coll., 88-11, *Macroscytus japonensis* Scott; 4 ♂, 1 ♀: China, Fokien [=Fujian], G. Siemssen vend., 1.10.1912; 1 ♂, 2 ♀: China, Peking [=Beijing], *Macroscytus subaeneus* Dall., det. O. Staudinger; 1 ♂, 1 ♀: China, Mongtse [=Möngtsze], Tenant 1912; 1 ♀: China, Foochow [=Fuzhou], 10-14.vii.1936, M.S. Yang; 1 ♀: China, Kiang-Tou, S.O., J. de Joannis 1911.

The holotype is kept in the Zoological Museum of the Amsterdam University, the paratypes in the Natural History Museum in London, the Zoological Institute in St. Petersburg, the Zoological Institute and Museum of the Hamburg University, the National Museum of Natural History in Paris, and in the author's collection.

Description

Body length: 7.10-9.22 mm in ♂ and 7.35-8.82 mm in ♀; body width: 4.26-5.20 mm in ♂ and 4.28-5.10 mm in ♀. Dorsal surface: Castaneous to dark castaneous, sometimes almost black.



Figs 1-5. *Macroscytus confusus* spec. nov. and *M. japonensis*. 1-4, *M. confusus* spec. nov. 1, paramere; 2, penis; 3, 2nd conjuctival appendages (a - lateral view, b - lower side view); 4, opening of male genital capsule. 5, *M. japonensis*, opening of male genital capsule.

Head: Impunctate, except for three primary setigerous punctures, among them a single preocular puncture; clypeus free, as long as paraclypei; eyes from pale brown through reddish brown to blackish brown, ocular index 2.70-3.20 (♂: 2.70-3.20, ♀: 2.80-3.20); ocelli yellowish or reddish brown, interocellar distance 5.1-7.3 times the distance of ocellus to eye; antennae pale brown or brown, 3rd rostral segment 1.0-1.2 times as long as the 2nd; rostrum pale brown or brown, surpassing the middle of mesosternum and sometimes reaching the middle coxae.

Thorax: Pronotum without a postmedian transverse impression; disc with an arcuate patch of punctures behind head, a broad band of many punctures behind the middle, and numerous punctures antero-laterally; each lateral margin with 5-7 submarginal setigerous punctures. Scutellum densely punctured with exception of antero-lateral angles and the extreme apex; punctures of the same size as or slightly larger than those on pronotum. Corium conspicuously punctured; clavus with one complete and two partial rows of punctures; mesocorium with two rows of punctures paralleling clavocorial suture, mesocorial disc densely punctured; exocorium with weaker punctuation; costa with 2 setigerous punctures; membrane browned, semihyaline, surpassing the tip of abdomen. Propleural depression with punctures; evaporatoria typical of the genus. Male posterior femora with almost indistinct subbasal tooth on dorsal margin; male posterior tibia with small and only slightly developed subbasal tubercle; female posterior legs not modified.

Abdomen: Sternites wrinkled laterally, punctures present only around spiracles.

Genitalia: Paramere as in fig. 1; penis as in fig. 2; 2nd conjunctival appendages as in figs 3a and 3b; and opening of male genital capsule as in fig. 4.

Comparative notes

Males of the new species can be easily separated

from those of *Macroscytus japonensis* by the shape of the opening of the genital capsule (figs 4-5): its dorsal margin is rounded in *M. confusus*, while it is angularly insinuated in *M. japonensis*.

Unfortunately I was unable to find reliable characters for separating the females of the two species, but it is possible to separate them when several characters and longer series of specimens are considered. Females of *Macroscytus confusus* are smaller and more ovate in outline (7.35-8.82 mm in length, 4.28-5.10 mm in width) than those of *M. japonensis* (8.10-10.50 mm, 4.65-6.00 mm). Besides, the eyes in *M. confusus* are smaller than in *M. japonensis* (ocular index of 2.80-3.20 and 2.00-3.00, respectively), and the 3rd antennal segment is only 1.0-1.2 times longer than the 2nd in *M. confusus* against 1.1-1.3 times in *M. japonensis*.

Distributional notes

The available data show that only *Macroscytus japonensis* is known from the Far East territory of Russia and from Korea, whereas both *M. japonensis* and *M. confusus* occur in Japan and China.

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