



## Review of the genus *Euconocephalus* Karny (Tettigoniidae: Conocephalinae: Copiphorini) from China

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### Abstract

This paper reviews species of the genus *Euconocephalus* Karny from China, provides a key to species from China, and describes a new species, namely *E. longissimus* Wang & Shi **sp. nov.**. This new species differs from known species in the genus in the following: body comparatively large; fastigium verticis relatively long, ventral margin about 3 times as longitudinal diameter of eyes; Cu2 vein slender and long, with about 105 teeth (*E. nasutus* and *E. pallidus* with about 70 teeth); titillators symmetrical L-shaped, apical parts widened, and basal parts outcurved (*E. nasutus* X-shaped, flat; *E. pallidus* apical parts closed, and basal portions outcurved). The type specimens are deposited in the Museum of Hebei University and Faculty of Conservation Biology, Southwest Forestry University.

**Key words:** *Euconocephalus*, new species, review, Conocephalinae, Tettigoniidae

### Introduction

*Euconocephalus* was proposed as a subgenus of the genus *Conocephalus* by Karny (1907) with type species *Euconocephalus acuminatus* (Fabricius) originally described as *Locusta acuminata*, and it was raised to generic status by Karny (1912). So far *Euconocephalus* includes 33 species (subspecies) worldwide (Eades & Otte, 2010). They are mainly distributed in tropical and subtropical areas, mainly in south Asia, Africa and Australia. In China, four species of the genus had been reported previously, i.e., *E. brachyxiphus* (Redtenbacher, 1891); *E. femoralis* Walker, 1869; *E. nasutus* Thunberg, 1815; *E. pallidus* (Redtenbacher, 1891). *E. nasutus* is a widely distributed species. The general distribution extends from China, Thailand, Malaysia to Indonesia. Many species, including *E. acuminatus*, *E. rosaceus*, *E. thunbergi* and *E. varius et al.*, were considered to be its synonyms (Vickery *et al.*, 1999; Liu & Jin, 1999; Storozhenko & Paik, 2007). In Storozhenko & Paik (2007), four species above were considered to be synonyms of *E. nasutus*. All of the five species of *Euconocephalus* from Micronesia were considered to be synonyms of or refer to *E. nasutus* by Vickery *et al.* (1999). *E. nasutus* and *E. pallidus* are dominant species in China. Both species have the fastigium verticis short, the former tegmina subtruncate at apices in males; and the latter tegmina narrow rounded at apices in males. By comparing holotype or syntype photos from Orthoptera Species File Online (Eades & Otte, 2010), we thought *E. femoralis* was similar to *E. pallidus* in having the tegmina narrow and rounded at apices in males, but distinguished from other species only by color. Color is not a reliable character because many species of *Euconocephalus* are bicolored, and some pinned specimens may be the result of different preservation methods. We have not studied the latter species in enough detail to make statements about the integrity of *E. femoralis*. This paper focuses on *E. nasutus* and *E. pallidus*. A new species is described and a key for the identification of the species from China is presented. All type specimens were preserved in the Museum of Hebei University and Faculty of Conservation Biology, Southwest Forestry University.