



<http://dx.doi.org/10.11646/zootaxa.3981.4.7>

<http://zoobank.org/urn:lsid:zoobank.org:pub:842545FD-625C-4261-92B6-8B949BFC3E10>

## Review of the genus *Qinshuiacris* (Orthoptera: Acrididae) from China with proposal of *Caryanda viridis*-species group and description of a new species

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### Abstract

Based on an examination of type and additional material, *Qinshuiacris viridis* Zheng & Mao, 1996 and some allied species in the genus *Caryanda* are reviewed. *Q. viridis* Zheng & Mao, 1996 is transferred to *Caryanda* as a new combination: *C. viridis* (Zheng & Mao, 1996) **comb. nov.**. The female of *C. viridis* is described for the first time and sixty-two topotypes are designated. The genus *Qinshuiacris* Zheng & Mao, 1996 is synonymized with *Caryanda* Stål, 1878 because of the transfer of the type species. *C. yini* Mao & Ren, 2006 is proposed as a new junior synonym of *C. dehongensis* Mao, Xu & Yang, 2003. A new species, *C. eshana* Mao **sp. nov.**, is also described and illustrated. Additionally, the conception of the *Caryanda viridis*-species group is proposed to contain the four allied species with falciform cerci: *C. albomaculata* Mao, Ren & Ou, 2007, *C. dehongensis* Mao, Xu & Yang, 2003, *C. eshana* Mao **sp. nov.**, and *C. viridis* (Zheng & Mao, 1996) **comb. nov.**. A key to the species of *C. viridis*-species group is provided. Type specimens are deposited in the Biological Science Museum, Dali University (BMDU), Yunnan Province, China, in the Institute of Zoology, Shaanxi Normal University (IZSNU), Shaanxi Province, China and in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS).

**Key words:** *Qinshuiacris*, *Caryanda*, Acrididae, Orthoptera, new synonym, new combination, new species

### Introduction

The genus *Qinshuiacris* Zheng & Mao, 1996 was proposed with the type species *Qinshuiacris viridis* Zheng & Mao, 1996, which was described based on a single male from Yunlong County, western Yunnan, China. It was subsequently listed under the subfamily Podisminae (Li, Xia, *et al.*, 2006) or the tribe Podismini in the subfamily Melanoplinae (Eades *et al.*, 2014). However, after a careful reexamination of the types of *Q. viridis*, we found that the external lower genicular lobe of the hind femur was spinous on the left and acutely angular on the right, and the epiphallus was morphologically extremely similar to that of *Caryanda dehongensis* Mao, Xu & Yang, 2003. Moreover, all of the additional specimens collected from the type locality had spinous external lower genicular lobes on the hind femora. These agreed well with the definition of the genus *Caryanda*. Therefore, we transferred *Qinshuiacris viridis* to the genus *Caryanda* as a new combination: *C. viridis* (Zheng & Mao, 1996) **comb. nov.**. The genus *Qinshuiacris* Zheng & Mao, 1996 was synonymized with *Caryanda* Stål, 1878 since the type species was transferred to the latter.

To clarify the relationship of *C. viridis* with other *Caryanda* species, a further study on some allied species was carried out. As a result, *C. yini* Mao & Ren, 2006 was proposed as a new junior synonym of *C. dehongensis* Mao, Xu & Yang, 2003 and a new species, *C. eshana* Mao **sp. nov.**, was described and illustrated. In addition, the conception of the *Caryanda viridis*-species group was proposed to contain the four allied species with falciform cerci in males.