



## Notes on *Prosopocoilus* Hope (Coleoptera: Scarabaeoidea: Lucanidae) from China, with the description of two new species

HAO HUANG<sup>1</sup> & CHANG-CHIN CHEN<sup>2</sup>

<sup>1</sup>503, East, No.1 Dong-ting-hu Road, Qingdao, P.R.China. E-mail: cmdhxx@hotmail.com

<sup>2</sup>Technical Center, Tianjin New Wei San Industrial Company, Limited, P.R.China. E-mail: natures@nws.cn

### Abstract

*Prosopocoilus yangi* Fukinuki has been rediscovered from central China and is redescribed with male and female genitalia illustrated. A similar species, *P. simianshanus* **new species**, is described from Chongqing, central China. *Prosopocoilus reni* **new species** is described from Hainan, China. Taxonomic notes are given for *Kirchnerius guangxii* Schenk, *Prosopocoilus astacoides* (Hope) and *Prosopocoilus duplodentatus* Benesh. Three new synonyms are presented: *Prosopocoilus* Hope = *Kirchnerius* Schenk **new synonym**; *Prosopocoilus cyclommatoides* Lacroix = *Kirchnerius guangxii* Schenk **new synonym**; *Prosopocoilus oweni melli* Kriesche = *Prosopocoilus duplodentatus* Benesh **new synonym**.

**Key words:** Lucanidae, *Prosopocoilus*, *Kirchnerius*, new species, new synonym, redescription, China

### Introduction

*Prosopocoilus yangi* Fukinuki, 2004 was described based on a single male from Jiangxi, China. Since then, no information about this species has been published. In 2009, colleagues collected a few lucanid larvae from Chongqing in central China and reared some adults of *Prosopocoilus yangi*. We redescribe this species and illustrate the male and female genitalia in this paper.

In the same area where *P. yangi* was rediscovered, a similar species was collected and identified as a new species. A comparative study in male and female genitalia shows that the new species, *P. simianshanus*, is most similar to *P. yangi* and *P. cyclommatoides* (Lacroix, 1978).

In addition, another new species, *P. reni*, is described from Hainan, China, which is similar to *P. astacoides* (Hope, 1840). The male and female genitalia of all the known Chinese subspecies of *P. astacoides* are illustrated and compared.

Some classification changes are made to other Chinese *Prosopocoilus* species. *Prosopocoilus duplodentatus* Benesh, 1943 from Sichuan is considered as a new junior synonym of *P. oweni melli* Kriesche, 1922 from Guangdong, with the holotypes of both taxa illustrated for the first time. *Kirchnerius guangxii* Schenk is considered as a new junior synonym of *Prosopocoilus cyclommatoides* Lacroix.

The delimitation of the genus *Prosopocoilus* Hope, 1845 is problematic and phylogenetic analysis is needed in the future. In this paper the delimitation of *Prosopocoilus* tentatively follows Benesh (1960) and Krajcik (2001, 2008). Therefore, *Kirchnerius* Schenk is considered as a new junior synonym of *Prosopocoilus* Hope.

### *Prosopocoilus yangi* Fukinuki, 2004

(Figs. 1, 9, 13, 17, 21, 25, 29, 34)

*Prosopocoilus yangi* Fukinuki, 2004: 31, Fig. 7 (male holotype), “Junbon shan, Leanshin county, Jangxi (*sic*) prov”

**Material examined. CHINA: Chongqing:** 42 ♂♂, 34 ♀♀, Nanchuan County, Mt. Jinfoshan, 1000-1400 m, several larvae collected by He-Li Deng, Xiao-Dong Yang and Li-Jiang Wang from field in VI.2008, reared by J. Hao,