



## CRYPTOPERLA DUI, SP. N., A NEW STONEFLY FROM SOUTH CHINA (PLECOPTERA: PELTOPERLIDAE)

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### ABSTRACT

*Cryptoperla dui*, sp. n. is described from male specimens taken in Sichuan, and Yunnan provinces, China. The new species is superficially similar to *C. bisaeta* (Kawai) and *C. kali* Stark but may not be phylogenetically close to either.

**Keywords:** Plecoptera, China, *Cryptoperla*, new species

### INTRODUCTION

Despite the work of Uchida & Isobe (1988), Stark (1989) and Sivec (1995), *Cryptoperla* continues to be a perplexing group of Oriental and eastern Palearctic stoneflies. Presently the group remains a small one with about 20 recognized species but the variety of cercal modifications documented for the group continues to grow. In the present study another general modification, that of multiple polyp shaped, spine-bearing processes is documented for a species found in several localities in south China. I take great pleasure in naming this species for my colleague, Prof. Du Yuzhou, in recognition of his numerous contributions to the knowledge of Chinese stoneflies.

#### *Cryptoperla dui*, sp. n. (Figs. 1-3)

**Types.** Holotype ♂ from Sichung Wenchung, 2500-3000 m, 6. VII. 1983, Sichuan, China, deposited in the Institute of Zoology, Academia Sinica, Beijing. Paratype: China: Yunnan, Handel-Mazzetti, 1 ♂ (Naturhistorisches Museum, Wien).

**Male.** Forewing length 11 mm. General color brown without distinctive pattern. Ocelli small, widely spaced, nearer compound eyes than to each other. Posterior margin of tergum 10 projects between cercal bases, somewhat triangular in outline (Fig. 1). Basal cercal segment 5-6 times long as wide and rather densely fringed primarily along apical half of

inner margins with long setae; basal segment modified at tip, bearing several small polyp shaped structures which appear as malformed partial segments; each polyp bears a tuft of close set thickened setae set in a short row (Fig. 3). Vesicle more than twice as wide as long (Fig. 2).

**Female.** Unknown.

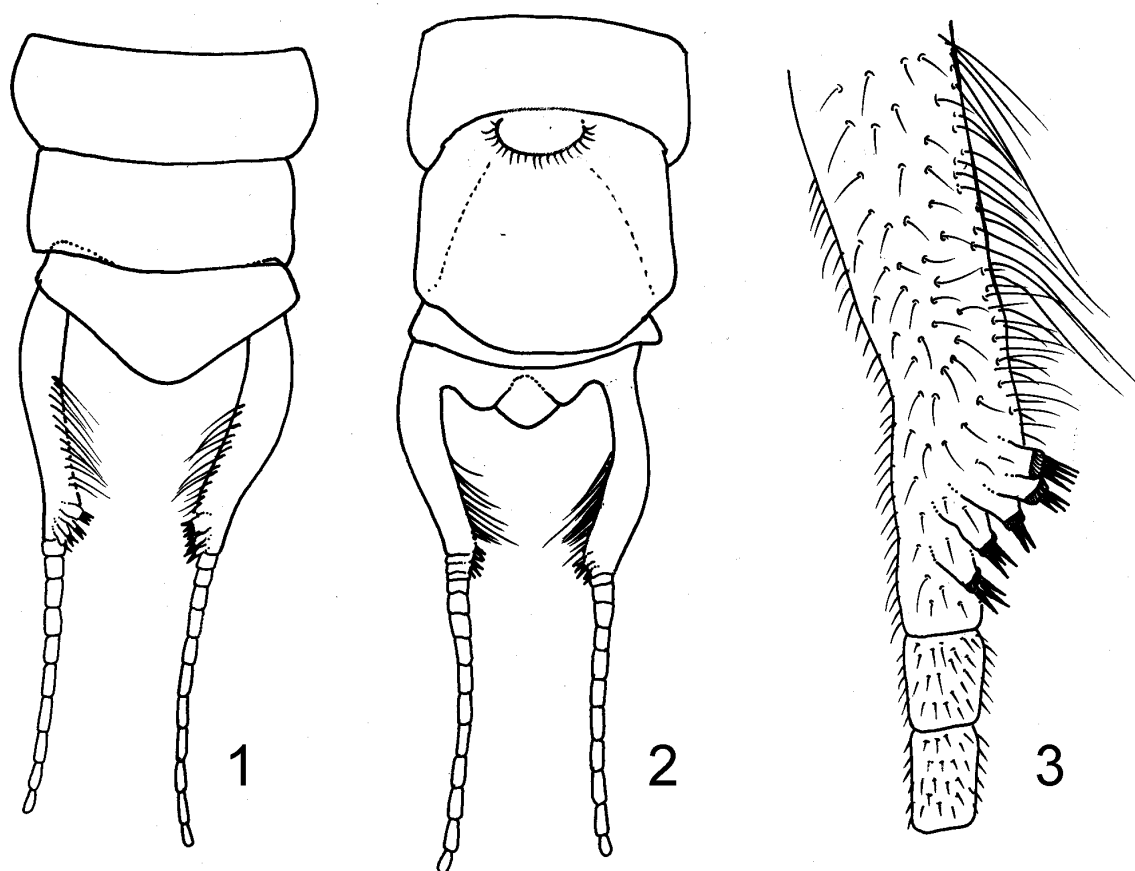
**Larva.** Unknown.

**Diagnosis.** In Stark (1989) this species will key to couplet 8 where an impasse occurs and the species cannot be satisfactorily assigned to *C. bisaeta* (Kawai) (Kawai 1968) or *C. kali* Stark (Stark 1989). The cerci of males of this species is at least superficially similar to that of *C. bisaeta*, however in that species there is a single long slender polyp which bears a tuft of long thin setae. There is also a general similarity with *C. kali* but again the cerci have only one modified process and this bears a single seta. In addition, *C. kali* males have a very narrow vesicle.

**Etymology.** The patronym honors Prof. Du Yuzhou.

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Figs. 1-3. *Cryptoperla dui*. 1. Male terminalia, dorsal. 2. Male terminalia, ventral. 3. Male cercus.

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