A new species of *Capnia* (Plecoptera: Capniidae) from China

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**Abstract**

A new species of the genus *Capnia*, *Capnia yunnana* sp. nov., is described as new to science from Yunnan Province, Southwestern China. Its relationship with closely related species is discussed.

**Key words:** Plecoptera, Capniidae, *Capnia yunnana*, new species, China

**Introduction**

*Capnia* Pictet, 1841 is the largest capniid genus with 117 species from the Holarctic and Oriental Regions (DeWalt et al. 2010). The following five species are known from China: *Capnia cordata* Kimmins, 1947; *C. montivaga* Kimmins, 1947; *C. pedestris* Kimmins, 1947; *C. qilianshana* Li & Yang, 2009; and *C. tibetana* Kimmins, 1947 (Kimmins 1947, Harper 1977, Jewett 1975, Li & Yang 2009, Zwick & Sivec 1980, Sivec 1981). In the present paper, a new *Capnia* species, *C. yunnana* sp. nov., is described from Yunnan Province. An updated key to males of the genus *Capnia* from China is provided. The studied material is deposited in the Insect Collection of Henan Institute of Science and Technology (HIST) and Entomological Museum of China Agricultural University (CAU), Beijing, and all of the specimens are preserved in 95% ethanol. The morphological terminology follows that of Nelson & Baumann (1989) and Baumann et al. (1977).

**Taxonomy**

**Updated key to males of *Capnia* from China (adapted from Li & Yang 2009)**

(*Capnia montivaga* unknown)

1. Wings absent; subgenital plate without vesicle (Fig. 7 in Kimmins 1947). .................................................. *C. pedestris*
   - Wings present; subgenital plate with vesicle. .......................................................... 2
2. Epiproct distinctly enlarged medially in lateral view (Fig. 10 in Kimmins 1947). ........................................ *C. tibetana*
   - Epiproct nearly parallel medially in lateral view ..................................................... 3
3. Epiproct with acute apex and slightly hooked ventrally in lateral view (Fig. 9 in Kimmins 1947; Fig. 5: e–f in Zwick & Sivec 1980). .......................................................... *C. cordata*
   - Epiproct slightly swollen in lateral view (Figs. 2–3, 5) ................................................... 4
4. Epiproct with rounded and entire apex (Figs. 3 & 5 in Li & Yang 2009). ................................................. *C. qilianshana*
   - Epiproct with bifurcate apex (Figs. 5 & 7) ................................................................. *C. yunnana* sp. nov.