

Polypedilum (Tripodura) cypellum sp. nov. (Diptera: Chironomidae) from Xishan Island, Zhejiang Province

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Abstract: *Polypedilum (Tripodura) cypellum* sp. nov. from Xishan Island, Zhejiang Province is described. The new species is most similar to *P. (T.) harteni* Andersen & Mendes, 2010 morphologically. It can be distinguished from the known species in this genus by the goblet-shaped superior volsella. Diagnostic characters of the male imago (wing, fore tibial apex, hypopygium and superior volsella) are illustrated.

Key words: Nematocera; Culicoidea; *Polypedilum*; taxonomy

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浙江西闪岛三突多足摇蚊亚属一新种（双翅目：摇蚊科）

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摘要: 记述采自浙江省西闪岛的三突多足摇蚊亚属 1 新种: 杯状三突多足摇蚊 *Polypedilum (Tripodura) cypellum* sp. nov.。该新种与哈氏三突多足摇蚊 *P. (T.) harteni* Andersen & Mendes, 2010 相似, 区别于本亚属其它已知种的主要特征是具有高脚杯状的上附器。文中提供了雄成虫的翅、前足胫节端部、生殖节、上附器等特征图。

关键词: 长角亚目; 蚊总科; 多足摇蚊属; 分类

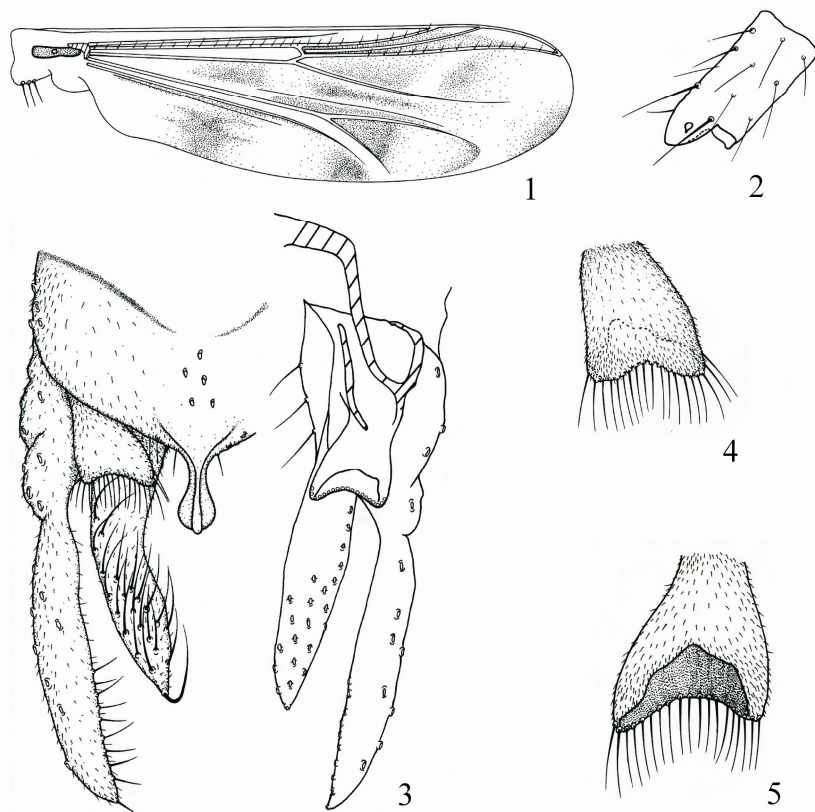
Introduction

Polypedilum Kieffer is a cosmopolitan genus, occurring in all zoogeographical regions except Antarctica. According to Sæther *et al.* (2010), this genus contains eight subgenera: *Polypedilum sensu strictus* Kieffer, 1913; *Pentapedilum* Kieffer, 1913; *Tripedilum* Kieffer, 1921; *Kribionympha* Kieffer, 1921; *Tripodura* Townes, 1945; *Uresipedilum* Oyewo & Sæther, 1998; *Cerobregma* Sæther & Sundal, 1999 and *Probolum* Andersen & Sæther, 2010. The subgenus *Tripodura* was established by Townes in 1945, with *Polypedilum (Tripodura) simulans* Townes, 1945 as type species. To date, more than 140 species are described

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Hypopygium (Fig. 3). Tergite IX with 5 strong median setae and 6 setae at base of anal point. Laterosternite with 4 setae. Anal point broad, apically rounded, 25 μm wide in apex, 25 μm wide in base, 63 μm long, without lateral projections. Phallapodeme 33 μm long. Transverse sternapodeme 58 μm long. Gonocoxite 444 μm long. Superior volsella 75 μm long, 68 μm wide, goblet-shaped, hollow; covered with microtrichia, with 19 setae on distal parts of the outer margin (Figs. 4, 5). Inferior volsella 175 μm long, digitiform, apex narrowed, with 22 long setae. Gonostylus 450 μm long, apex narrowed, with 10 long setae along inner margin. HR 0.99. HV 1.37.



Figures 1–5. *Polypedilum (Tripodura) cypellum* sp. nov. ♂. 1. Wing; 2. Fore tibial apex, dorsal view; 3. Hypopygium; 4. Superior volsella, dorsal view; 5. Superior volsella, ventral view.

Holotype. ♂, **China:** Zhejiang, Zhoushan City, Putuo District, Dengbu Village, Xishan Island, 29°89.38'N, 122°30.78'E, 30-V-2013, sweeping method, Xin QI.

Etymology. The species epithet is from the Latin “*cypellum*” which means “goblet”, referring to the goblet-shaped superior volsella.

Distribution. This specimen was collected on the sea island of Zhejiang Province, Oriental China.

Remarks. The shape of the superior volsella of *P. (T.) cypellum* sp. nov. is characteristic of this subgenus. This new species closely resembles *P. (T.) harteni* Andersen & Mendes,

2010 in the structure of hypopygium and the wing spots; the main differences between these two species are given in Table 2.

Table 2. Differences between *P. (T.) cypellum* sp. nov. and *P. (T.) harteni* Andersen & Mendes

	<i>P. (T.) cypellum</i>	<i>P. (T.) harteni</i>
Median setae of tergite IX	5	2–11
Anal point	With 6 setae at base	With 2 rows of short dorsal setae (each row with 8–10 setae)
Superior volsella	Goblet-shaped	Pediform
Gonostylus	Slender, apex narrowed	Apex swollen

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