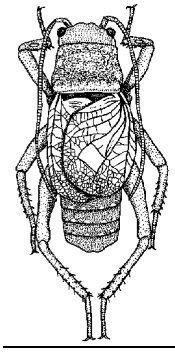

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A KEY TO THE CHINESE SPECIES OF *POLIONEMOBIUS* GOROCHOV (ORTHOPTERA: GRYLLIDAE), WITH DESCRIPTION OF A NEW SPECIES

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Polionemobius yunnanus **sp. n.** is described and illustrated from Yunnan province, China. A key to the Chinese species of the genus *Polionemobius* is given.

KEY WORDS: Orthoptera, Gryllidae, Nemobiinae, *Polionemobius*, taxonomy, new species, key, China.

Х.Ю. Лю[1,2)], Ф.М. Ши[2*)]. Определительная таблица китайских видов рода *Polionemobius* Gorochov (Orthoptera: Gryllidae) с описанием нового вида // Дальневосточный энтомолог. 2014. N 276. С. 1-6.

Из провинции Юньнань в Китае описан *Polionemobius yunnanus* **sp. n.** Составлена определительная таблица известных из Китая видов рода *Polionemobius*.

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The genus *Polionemobius* originally was treated as a subgenus of *Dianemobius* by Gorochov (1983), but later was upgraded to the generic level by Gorochov (1986). At present it includes nine species distributed as follow: *P. annulicornis* Liu, He et Liu, 2010 from China (Yunnan), *P. batavicus* (Gorochov, 1984) and *P. decipiens* (Gorochov, 1984) both from Malaysia (Java), *P. micado* (Shiraki, 1911) from Japan, Korea and China, *P. modestus* Gorochov, 1994 from Seychelles, *P. puchellus* (Gorochov, 1984) and *P. tarbinskyi* Gorochov, 1986 both from Papua New Guinea, and *P. taprobanensis* (Walker, 1869) from Sri Lanka, India, Malaysia, China, Japan, Korea and Russian Far East (Walker, 1869; Shiraki, 1911; Gorochov, 1984; 1986, 1994; Liu et al., 2010; 2007; Eades *et al*., 2014).

One new species is found in Yunnan province of China and described below. Original key to Chinese species of *Polionemobius* is given. The types of the new species are deposited in the Museum, Hebei University, Baoding, China (MHBU).

Genus *Polionemobius* Gorochov, 1983

Polionemobius (as subgenus of *Dianemobius* Vickery, 1973) Gorochov, 1983: 44; Otte, 1994: 31; Yin & Liu, 1995: 20.

Polionemobius: Gorochov, 1986: 18; Storozhenko, 1986: 266; Ichikawa *et al*., 2000: 292; Storozhenko, 2004: 218; Ichikawa *et al*., 2006: 485; Storozhenko & Paik, 2007: 108.

Type species: *Trigonidium taprobanense* Walker, 1869, by original designation.

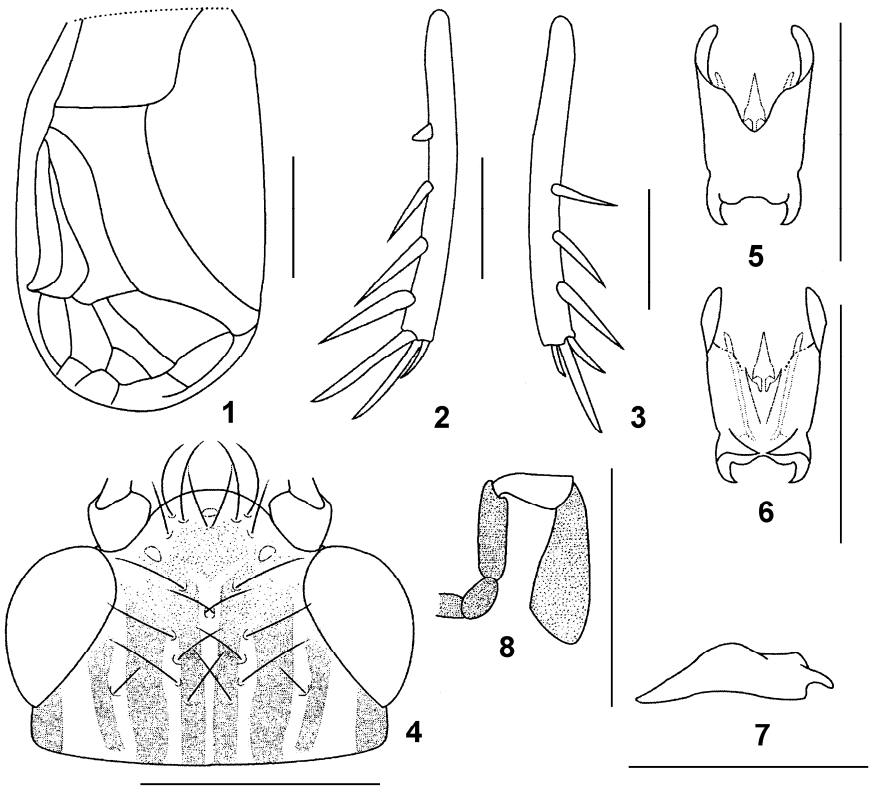
DIAGNOSIS. Body small-sized and slender. Head rough, eyes well-developed, frontal rostrum distinctly broader than scapus of antennae, clypeus slightly protuberant. Pronotum transverse, with posterior margin about 1.5 times as wide as long. Male tegmina mostly extending over abdomen, wings obviously exceeding abdominal apex or absent. Fore tibia with a rather large tympanum at outer side; dorsum of hind tibia with 3 spines on outer side, inner side in male with 4 spines, in female with 3-4 spines. Ovipositor slightly shorter than posterior femur. Male genitalia: epiphallus with a pair of weakly developed middle lobes at apex, which obviously shorter than lateral lobes; epiphallus and ectoparamere conjoint.

COMPOSITION. Genus consists of nine species, five of which are known from China.

Key to species of *Polionemobius* from China

1. Dorsal area of tegmina with dark spots ……..… *P. taprobanensis* (Walker, 1869)
– Dorsal area of tegmina uniformly colored, without dark spots ……..… 2
2. Antennae black and white ……..… 3
– Antennae uniformly colored, brown to dark brown ……..…. 4
3. White section of antennae without dark rings; lateral lobes of epiphallus rather narrow ……..… *P. flavoantennalis* (Shiraki, 1911)
– White section of antennae with several dark rings; lateral lobes of epiphallus rather broad ....……...… *P. annulicornis* Li, He et Liu, 2010

4. Body light brown to brown; all segments of maxillary palps brown; lateral lobes of epiphallus rather short ……...…….. *P. mikado* (Shiraki, 1911)
– Body black; 4th segment of maxillary palps white, other segments dark brown; lateral lobes of epiphallus rather long ……...……..… *P. yunnanus* **sp. n.**



Figs. 1–8. *Polionemobius yunnanus* sp. n., male. 1 – dorsal area of right tegmen from above; 2 – hind tibia from inner side; 3 – hind tibia from outer side; 4 – head from above; 5 – genitalia from above; 6 – genitalia from below; 7 – genitalia from side; 8 – maxillary palp from side. Scale bars = 1 mm.

***Polionemobius yunnanus* Liu et Shi, sp. n.**
Figs 1–10

MATERIAL. Holotype – ♂, **China**: Yunnan province: Tengchong, Houqiao, 11.VIII 2005, coll. Hao-Yu Liu (in MHBU). Paratypes: Yunnan province: the same data as holotype, 7♂, 3♀; Lushui, Pianma, 26-27.VII 2005, 3♂, 6♀, coll. Hao-Yu Liu; Tengchong, Gaoligongshan, 8.VIII 2005, 1♂, coll. Hao-Yu Liu; Gongshan, 2-6.V 2004, 1♂, coll. Xiu-juan Yang & Yu-shuang Liu (in MHBU).

DESCRIPTION. MALE. Body small-sized and pubescent. Head as wide as width of anterior margin of pronotum, frontal rostrum about twice as wide as scapus; median ocellus small and projecting forward; lateral ocelli rather slightly and obliquely projecting; last joint of maxillary palps longer than 3rd joint, wide and truncated at apex; last joint of labial palps rather thin and claviform. Pronotum trapeziform, slightly widened posteriorly, about 0.6 times as long as width of posterior margin. Tegmina extending to apex of abdomen, mirror small, distinctly longer than wide, lateral area of tegmen with 5 oblique subcostal veinlets; wings absent. Fore tibia about 2 times as long as wide, with tympanum on outer surface. Hind tibia with 3 spines at outer side and 4 spines at inner side of dorsum. Supra anal plate rather long, narrowed posteriorly, posterior margin bluntly rounded. Subgenital plate trapeziform, slightly narrowed posteriorly, posterior margin rather straight. Genitalia: epiphallus long, with a pair of weakly developed middle lobes at apex, which obviously shorter than lateral lobes.

Figs.9–10. Habitus of *Polionemobius yunnanus* sp. n. 9 – male from above; 10 – female from side. Scale bars = 2 mm

FEMALE. General appearance similar to that of male. Tegmina nearly extending to 7th tergite of abdomen, with 7 veins on dorsal side. Hind tibia with 3 spines on inner side of dorsum. Subgenital plate semicircle, posterior margin distinctly emarginated in middle. Ovipositor short and curved upwards, with several small teeth on dorsal side, apex acute.

Body black. Head with light yellow longitudinal stripes on vertex; 4th joint of maxillary palpi white and others dark brown. Pronotum black brown, with light and dark spots on dorsal area. Ovipositor brown.

MEASUREMENTS. Length of body ♂ 5.1–5.5 mm, ♀ 5.3–5.5mm; length of pronotum ♂ 1.1–1.2 mm, ♀ 1.2–1.3 mm; length of tegmen ♂ 2.8–3.2 mm, ♀ 2.3–2.6 mm; length of hind femur ♂ 3.5–4.0 mm, ♀ 3.9–4.2 mm; length of ovipositor 2.1–2.3 mm.

DIAGNOSIS. The new species is similar to *P. mikado*, but differs by features given above in the key.

ETYMOLOGY. The specific name derives from type locality, Yunnan, China.

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