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Hao-Yu Liu^{1,2)}, Fu-Ming Shi^{2*)}. TWO NEW SPECIES OF THE GENUS *PTERONEMOBIUS* JACOBSON (ORTHOPTERA: GRYLLIDAE) FROM CHINA. – *Far Eastern Entomologist*. 2014. N 284: 19-23.

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Summary. Two new species of the nominative subgenus of the genus *Pteronemobius* Jacobson, 1905 are described from China, *P. (P.) ruficeps* sp. n. (Hainan) and *P. (P.) kangdingensis* sp. n. (Sichuan).

Key words: Orthoptera, Gryllidae, Nemobiinae, *Pteronemobius*, new species, China.

Х. Ю. Лю^{1,2)}, Ф. М. Ши²⁾. Два новых вида рода *Pteronemobius* Jacobson (Orthoptera: Gryllidae) из Китая // *Дальневосточный энтомолог*. 2014. N 284. С. 19-23.

Резюме. Из Китая описаны два новых вида номинативного подрода рода *Pteronemobius*: *P. (P.) ruficeps* sp. n. из провинции Хайнань и *P. (P.) kangdingensis* sp. n. из провинции Сычуань.

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The genus *Pteronemobius* Jacobson, 1905 is the largest genus in the subfamily Nemobiinae, up to now it includes 120 species and subspecies mostly distributed in tropics and subtropics (Gorochoy, 1984; Otte, 1994; Storozhenko & Paik, 2007; Eades *et al.*, 2014). The genus is divided in two subgenera, *Stilbonemobius* Gorochoy, 1984 and nominotypical; last subgenus is characterized by hind tibiae with 4 external spines and by the apical part of epiphallus with two strongly sclerotized lophi (in *Stilbonemobius* hind tibiae with 3 external spines and apical part of epiphallus with membranous lophi). Eight species and subspecies of *Pteronemobius* are known from China, and all of them belong to the nominotypical subgenus (Yin & Liu, 1995; Liu *et al.*, 1997; Deng & Xu, 2006; Li *et al.*, 2010).

In our recent study, two new species are discovered in Hainan and Sichuan provinces of China and described here. The holotypes and paratypes of both species are deposited in the Museum of Hebei University, Baoding, China (MHBUS).

DESCRIPTION OF NEW SPECIES

***Pteronemobius (Pteronemobius) ruficeps* Liu et Shi, sp. n.**

Figs 1–2, 5–8

MATERIAL. Holotype – ♂, **China:** Hainan province: Ledong, Jianfengling, 12-15.XI 2005, coll. Hao-Yu Liu (MHBUS). Paratypes: 19 ♂, 14 ♀, the same data as for holotype (MHBUS).



Figs. 1-4. *Pteronemobius* spp., body from above. 1-2 – *P. (Pteronemobius) ruficeps* sp. n.: 1 – male, 2 – female; 3-4 – *P. (Pteronemobius) kangdingensis* sp. n.: 3 – male, 4 – female. Scale bars=1 mm.

DESCRIPTION. MALE. Body small-sized and pubescent. Head as wide as width of anterior margin of pronotum, frontal rostrum very short and about 1.3 times as wide as scapus; median ocellus small and projecting forward; lateral ocelli large and slightly obliquely projecting outward; maxillary and labial palpi rather long, last joint of maxillary palpus wide and truncated at apex, and last joint of labial palpus claviform. Pronotum trapeziform, slightly widened posteriorly, about 0.6 times as long as width of posterior margin, anterior and posterior margins almost straight. Tegmina extending to apex of abdomen, present with one oblique vein, mirror small, distinctly wider than long, lateral field with 5 oblique subcostal veinlets; wings absent. Fore tibia with an oval tympanum on outer side. Hind tibia with 4 pairs of dorsal spines, the first inner spine very short and tuberculiform, the fourth inner spine obviously curved and slightly swollen at base (Fig. 8). Supra anal plate slightly longer than wide, rounded at posterior margin, concave in centre of dorsum. Subgenital plate truncate at posterior margin and slightly emarginated in middle. Genitalia (Figs. 5–7): apical part of epiphallus distinctly bent inwards, acute at apex; apical parts of ectoparamers distinctly widened, nearly triangular at apex, obviously shorter than epiphallus.

FEMALE. General appearance similar to that of male. Tegmina almost extending to middle of abdomen, present with 6 veins on dorsal field. Hind tibia with the first and fourth internal spines normal. Subgenital plate widely rounded at posterior margin and deeply emarginated in middle. Ovipositor short, about 0.5 times as long as length of hind femur, with several small teeth on dorsal side.

Body yellow brown. Head and dorsal area of pronotum red when alive, lateral area of pronotum black. Tegmen light brown on dorsal field, lateral field black; *Sc* vein of male white, *Cu₁* vein and transverse veins of female white. Hind femur with brown stripe on outer surface.

MEASUREMENTS. Length of body ♂ 5.9–6.2 mm, ♀ 6.2–6.5 mm; length of pronotum ♂ 1.2–1.3 mm, ♀ 1.3–1.5 mm; length of tegmen ♂ 3.4–3.5 mm, ♀ 2.0–2.2 mm; length of hind femur ♂ 4.1–4.4 mm, ♀ 4.3–4.6 mm; length of ovipositor 2.1–2.3 mm.

DIAGNOSIS. The new species can easily be distinguished from other *Pteronemobius* species by the male genitalia: apical parts of ectoparamers distinctly widened, nearly triangular at apex, obviously shorter than epiphallus. By short apical parts of epiphallus and ectoparamers and by weakly widened near the base fourth inner spine of male hind tibia *P. ruficeps* sp. n. is similar to *P. yezoensis* (Shiraki, 1911), but differs by the shape of apical part of epiphallus (in *P. yezoensis* apical part straight, with narrowly rounded apex).

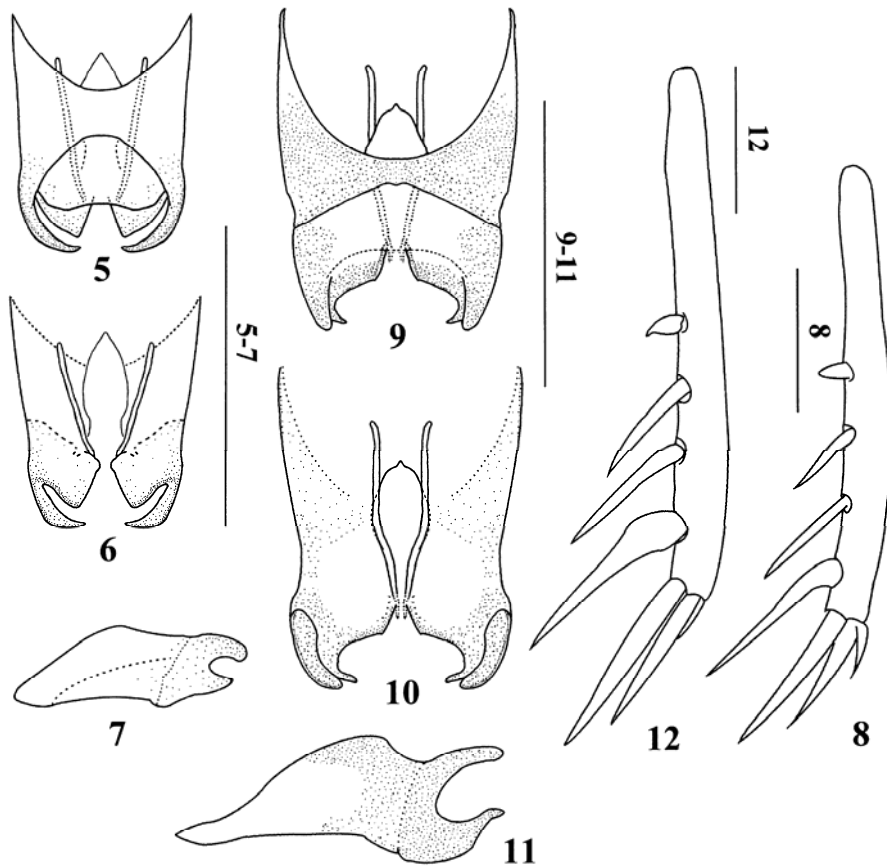
ETYMOLOGY. The specific name is derived from Latin “*ruficeps*”, referring to its red head when alive.

***Pteronemobius (Pteronemobius) kangdingensis* Liu et Shi, sp. n.**

Figs 3–4, 9–12

MATERIAL. Holotype – ♂, **China**: Sichuan province: Kangding, Pengta, 28-31.VIII 2005, coll. Fu-Ming Shi (MHBU). Paratypes: 16 ♂, 22 ♀, the same data as for holotype (MHBU)

DESCRIPTION. MALE. Body small-sized and pubescent. Head as wide as width of anterior margin of pronotum, frontal rostrum very short and about 1.3 times as wide as scapus; median ocellus small and projecting forward; lateral ocelli large and slightly projecting outward; maxillary and labial palpi rather thin and long, both last joints claviform. Pronotum trapeziform, slightly widened posteriorly, about 0.65 times as long as width of



Figs. 5–12. *Pteronemobius* spp., male. 5-8 – *P. (Pteronemobius) ruficeps* sp. n.: 5 – genitalia, dorsal view, 6 – the same, ventral view, 7 – the same, lateral view, 8 – hind tibia from inner side; 9-12 – *P. (Pteronemobius) kangdingensis* sp. n.: 9 – genitalia, dorsal view, 10 – the same, ventral view, 11 – the same, lateral view, 12 – hind tibia from inner side. Scale bars=1 mm.

posterior margin, anterior and posterior margins almost straight. Tegmina nearly extending to 9th tergite of abdomen, present with one oblique vein, mirror small, distinctly wider than long, lateral field with 6 oblique subcostal veinlets; wings absent. Fore tibia with an oval tympanum on outer side. Hind tibia with 4 pairs of dorsal spines, the first inner spine very short and tuberculiform, fourth inner spine obviously curved and swollen at base (Fig. 12). Supra anal plate longer than wide, rounded at posterior margin. Subgenital plate truncate at posterior margin and slightly emarginated in middle. Genitalia (Figs. 9–11): apical part of epiphallus slightly bent inwards, blunt at apex; apical parts of ectoparamers distinctly bent inwards, acute at apex, nearly as long as epiphallus.

FEMALE. General appearance similar to that of male. Tegmina nearly extending to 7th tergite of abdomen, present with 5 veins on dorsal field. Hind tibia with the first and fourth internal spines normal. Subgenital plate with posterior margin deeply emarginated in middle. Ovipositor short, about 0.6 times as long as length of hind femur, with several small teeth on dorsal side.

Body dark brown. Head with 3 black longitudinal stripes. Dorsal area of pronotum and dorsal field of tegmina brown, other parts black.

MEASUREMENTS. Length of body ♂ 6.3–7.3 mm, ♀ 6.0–8.5 mm; length of pronotum ♂ 1.2–1.4 mm, ♀ 1.2–1.5 mm; length of tegmen ♂ 3.2–3.5 mm, ♀ 3.1–3.5 mm; length of hind femur ♂ 4.6–4.8 mm, ♀ 4.7–5.1 mm; length of ovipositor 2.5–3.2 mm.

DIAGNOSIS. The new species is similar to *P. indicus* (Walker, 1869), but differs by the shape of apical parts of ectoparamers of male genitalia and dark brown body.

ETYMOLOGY. The specific name is derived from type locality, Kangding, Sichuan, China.

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