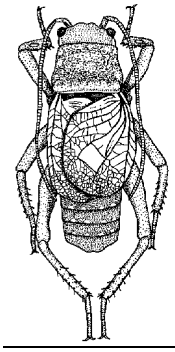


Far Eastern Entomologist

Дальневосточный энтомолог

Journal published by Far East Branch
of the Russian Entomological Society
and Laboratory of Entomology,
Institute of Biology and Soil Science,
Vladivostok

Number 283: 1-12 ISSN 1026-051X October 2014

hppt/ urn:lsid:zoobank.org:pub: D349AD72-9312-4699-A3C4-E60063E4B5F1

TAXONOMY OF THE KATYDIDS (ORTHOPTERA: TETTIGONIIDAE) FROM EAST ASIA AND ADJACENT ISLANDS. COMMUNICATION 9

A. V. Gorochov

Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St. Petersburg 199034, Russia. E-mail: orthopt@zin.ru

One new species of the genus *Euanisous* Hebard, 1922 as well as two new species and two new subspecies of the genus *Pseudoteratura* Gorochov, 1998 (Meconematinae: Meconematini) are described from Malaysia and Indonesia: *E. tawau* **sp. n.**, *P.* (*Pseudoteratura*) *spinea* **sp. n.**, *P.* (*P.*) *parallela curup* **subsp. n.**, *P.* (*P.*) *bella lambir* **subsp n.**, *P.* (*P.*) *mima* **sp. n.** The species *P.* (*P.*) *picta* (Karny, 1924), **comb. n.**, originally included in the genus *Xiphidiopsis* Redtenbacher, 1891, is transferred to a nominotypical subgenus of the genus *Pseudoteratura* and re-described on the material from its type locality.

KEY WORDS: Orthoptera, Tettigoniidae, Meconematinae, *Pseudoteratura*, *Euanisous*, new taxa, Malaysia, Indonesia.

А. В. Горохов. Таксономия кузнечиков (Orthoptera: Tettigoniidae) из Восточной Азии и соседних островов. Сообщение 9 // Дальневосточный энтомолог. 2014. N 283. С. 1-12.

Из Малайзии и Индонезии описаны один новый вид рода *Euanisous* Hebard, 1922, а также два новых вида и два новых подвида рода *Pseudoteratura* Gorochov, 1998 (Meconematinae: Meconematini): *E. tawau* **sp. n.**, *P.* (*Pseudoteratura*)

spinea **sp. n.**, *P.* (*P.*) *parallela curup* **subsp. n.**, *P.* (*P.*) *bella lambir* **subsp n.**, *P.* (*P.*) *mima* **sp. n.** Вид *P.* (*P.*) *picta* (Karny, 1924), **comb. n.**, первоначально включенный в род *Xiphidiopsis* Redtenbacher, 1891, перенесен в номинативный подрод рода *Pseudoteratura* и переописан по материалу из его типовой местности.

Зоологический институт РАН, Университетская наб. 1, Санкт-Петербург 199034, Россия.

INTRODUCTION

This paper is a continuation of the series of papers on taxonomy and faunistics of Indo-Malayan and Papuan Tettigoniidae. The previous communications of this series contain descriptions of 53 new taxa from the subfamilies Phaneropterinae, Conocephalinae and Meconematinae (Gorochov, 2011a, b, c, 2012a, b, 2013 a, b, 2014). In the present communication, two genera of Meconematinae (*Euanisous* Hebard, 1922 and *Pseudoteratura* Gorochov, 1998) are considered. The study is based on material from collection of the Zoological Institute, Russian Academy of Sciences, St. Petersburg. All types of new species and subspecies are deposited at this institute.

DESCRIPTIONS OF NEW TAXA

Subfamily Meconematinae

Tribe Meconematini

***Euanisous tawau* Gorochov, sp. n.**
Figs 1–7

MATERIAL. Holotype – ♂, **Malaysia**: Borneo I., Sabah State, Tawau Hills National Park near Tawau City, 200–400 m, partly secondary / partly primary forest, at light, 14–20.V 2013, A. Gorochov, M. Berezin, E. Tkatsheva. Paratype – ♀, same data as for holotype.

DESCRIPTION. Male. Body large for this tribe. Colouration light green, one-coloured but with following small marks: eyes brown; areas on pterothoracic pleurites yellowish; apical part of cerci and distal part of genital sclerite greyish; small mark at apex of both lobes of third tarsal segments, distal half of spines on hind tibiae, and distal part of apical spurs on these tibiae greyish brown. Structure of majority of body parts, including tympana of fore tibiae (outer tympanum open and oval, but inner one provided with strongly inflated medial lobe covering inner tympanal membrane; latter tympanum having large oval opening on dorsal surface of tibia between above-mentioned lobe and rest of tibia), typical of this genus; tegmina very long (approximately 5.3 times as long as pronotum), comparatively narrow, with stridulatory apparatus as in Fig. 1; hind wings longer than tegmina, with short distal part exposed behind tegminal apex (Fig. 2); epiproct consisting of a pair of short and almost conical hind processes directed backwards (each process having rather narrow, strongly curved and directed partly medially / partly downwards apical lobule); paraprocts lobe-like, slightly larger than above-mentioned processes and almost quadrangular in profile; cerci simple, without processes or denticles, and with distal

third clearly narrowing to apex; genital plate with not very large angular posteromedian notch and rather long and narrow posterolateral lobes (these lobes almost angular, with more or less acute apex and without additional teeth or denticles); genitalia with large, elongate sclerite having high and not very wide distal part (this part divided into a pair of lateral lobes by very narrow and not long posteromedian notch), with dorsal median groove on middle third of this sclerite, and with spine-like median structure situated on ventral surface of this sclerite not far from its apex (Figs 4–6).

Figs 1–3. *Euanisous tawau* sp. n.: 1 – hind half of pronotum with stridulatory apparatus of both tegmina from above, male; 2 – distal part of both wings in rest position from side; 3 – ovipositor with genital plate of female from side.

Female. General appearance almost as in male, but tegminal stridulatory apparatus undeveloped as well as epiproct and paraprocts unspecialized (smaller and roundly-angular in shape). Genital plate as in Fig. 7, but with characteristic well sclerotized fold along anterior edge; ovipositor long and rather simple in shape (Fig. 3).

Length (in mm). Body: ♂ 18, ♀ 17; body with wings: ♂ 36, ♀ 35; pronotum: ♂ 5.3, ♀ 4.7; tegmina: ♂ 28.5, ♀ 28; hind femora: ♂ 13.5, ♀ 13; ovipositor 15.

COMPARISON. The new species is most similar to *E. distinctus* Redtenbacher, 1891 from Java and *E. mirabilis* (Karny, 1923) from Penang I. (between Sumatra and Malacca), but it is distinguished from these species by longer wings (in male of *E. distinctus* and *E. mirabilis*, tegmina approximately 2.6 and 4.4 times as long as pronotum, respectively; Redtenbacher, 1891; Karny, 1923), a much shorter sclerite of the male genitalia, and the distal part of this sclerite clearly narrower and with a

posteromedian notch. From all the other congeners, *E. tawau* differs in a much less deep posteromedian notch of the male genital plate and the absence of additional teeth and denticles on the posterolateral lobes of this plate.

ETYMOLOGY. The new species is named after the Tawau Hills National Park.

***Pseudoteratura* (*Pseudoteratura*) *picta* (Karny, 1924), comb. n.**
Figs 8–17, 27, 37

MATERIAL. 1 ♂, **Indonesia**: Java I., Tjibodas, 23–26.X 2011, D. Gapon.

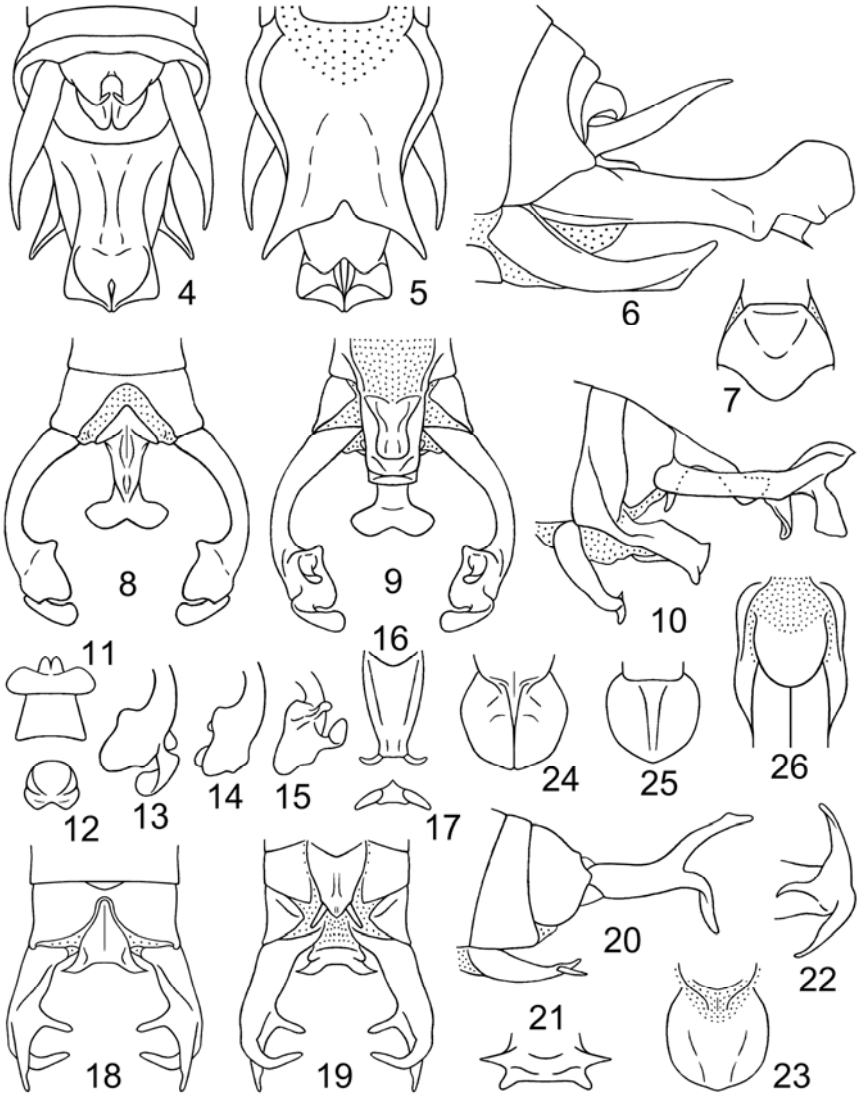
NOTE. This male is in accordance to the description by Karny (1924) and originates from the same locality (Tjibodas) as some syntypes of *Xiphidiopsis picta* Karny, 1924. In one of the previous papers, this species was indicated as similar to representatives of the genus *Pseudoteratura* Gor. (Ingrisch, 2006: p. 6), but it was not included in this genus. Here, I add this species in a nominotypical subgenus of the genus *Pseudoteratura*. However, my determination of the male studied as *P. picta* is not very exact, because its original description and Karny's pictures are insufficient.

This male has typical appearance for *Pseudoteratura* s. str.: body thin, very slender; colouration light greenish with reddish yellow median stripe, running from rostrum of head to hind part of pronotum and having dorsal surface of this rostrum and anterior part of this stripe on pronotal disc brown as well as hind part of this stripe on pronotal disc widened and dark brown (this dark widening having light median line; Fig. 27), with brownish medial areas on scape, with sparse small brown and brownish spots on antennal flagellum, and with slightly darkened distal part of lateral lobes on third tarsal segments; head rostrum rather short, almost conical but with somewhat flattened dorsum and with thin and slight median groove; wings long (much longer than body; Fig. 37), with distal part of hind wings exposed behind tegminal apex (length of this part almost 2.1 mm); structure of male abdominal apex as in Figs 8–17 (genitalia containing two sclerites: one large and elongate dorsal sclerite lacking spine-like processes and fused or articulated with ninth abdominal tergite; and one distinctly smaller ventral sclerite having widely truncate and slightly rounded apex).

Length (in mm). Body 10.5; body with wings 20; pronotum 3; tegmina 15.5; hind femora 8.2.

***Pseudoteratura* (*Pseudoteratura*) *spinea* Gorochov, sp. n.**
Figs 18–23, 28–33, 38, 39

MATERIAL. Holotype – ♂, **Indonesia**: Sumatra I., Bengkulu Prov., environs of Curup Town (not far from Bengkulu City), 03° 28–29' S, 102° 31–38' E, 1000–1500 m, on leaf of bush in secondary forest along small river at night, 24.IV– 2.V 2009, A. Gorochov, M. Berezin, E. Tkatsheva. Paratypes: 1 ♀, same data as for holotype; 1 ♀, same island but Sumatera Selatan Prov., environs of Banding Agung Vill. on Ranau Lake (Ranau Danau), 04° 48.695' S, 103° 55.289' E, 600–700 m., at light, A. Gorochov, M. Berezin, E. Tkatsheva.



Figs 4–26. *Euanisous* and *Pseudoteratura*: 4–7 – *E. tawau* sp. n.; 8–17 – *P. picta* (Karny); 18–23 – *P. spinea* sp. n.; 24 – *P parallela curup* subsp. n.; 25 – *P. bella lambir* subsp. n.; 26 – *P. mima* sp. n. Male abdominal apex from above (4, 8, 18), from below (5, 19), from below but without genital plate (9), and from side (6, 10, 20); genital plate of female (7, 23–26) and male (16) from below; male epiproct from behind (11); apex of genital sclerite (12), of genital plate (17), of epiproct (21), and of right cercus (22) from behind, male; distal part of right (13, 14) and left (15) cerci of male from above and slightly laterally (13), from above and slightly in front and medially (14), and from below and partly behind and medially (15).

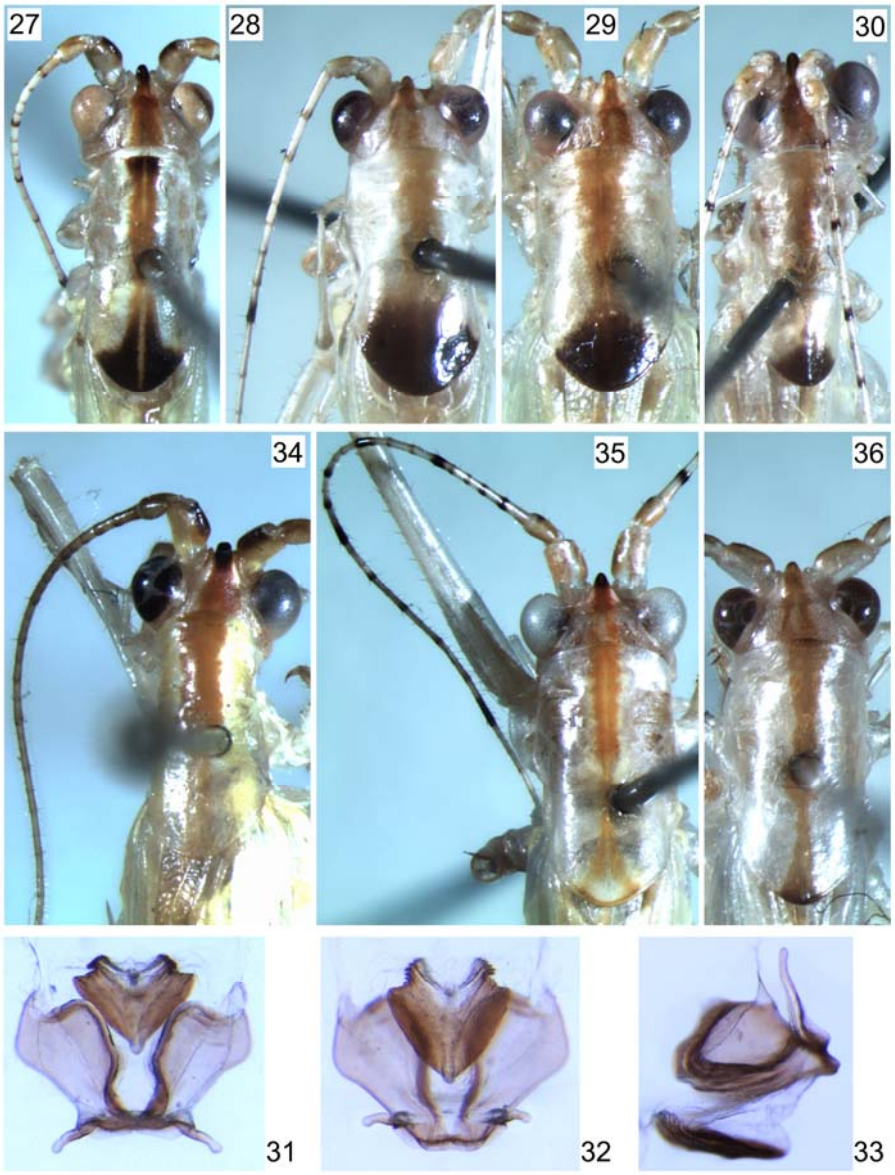
DESCRIPTION. Male. General appearance similar to that of *P. picta*, but dorsum of head rostrum reddish yellow (of same colour as median stripe on head and pronotum), anterior part of this stripe on pronotum also reddish yellow, hind part of pronotum with brown widened area somewhat larger than in *P. picta* and without light median line, antennae with similar marks on antennal flagellum (scape completely light), tegmina with several small brown and brownish spots (Figs 28, 38). Structure of body also similar to that of *P. picta* (including shape of rostrum and length of wings), but length of distal part of hind wing exposed behind tegminal apex approximately 2.6 mm, and abdominal apex somewhat different (Figs 18–20): tenth abdominal tergite with clearly narrower posteromedian notch; epiproct much shorter and with a pair of posterolateral spine-like projections and a pair of rounded tubercles under these projections (Fig. 21); cerci somewhat shorter, less curved, with slightly thicker middle part and three almost spine-like apical lobules (Fig. 22); genitalia with shorter dorsal sclerite having a pair of finger-like spines and deep anteromedian notch, and with almost triangular ventral sclerite (Figs 31–33).

Female. Colouration as in male (Fig. 29) or with slightly darkened rostral apex and distinctly smaller brown area on hind part of pronotal disc (female from Sumatera Selatan Prov.; Fig. 30). Structure of body (excepting sexual appendices of abdomen) also similar to that of male but with some differences: tegminal stridulatory apparatus absent; length of exposed part of hind wings more variable (2.2–2.5 mm); last abdominal tergite, epiproct and cerci unspecialized. Genital plate and ovipositor as in Figs 23, 39.

Length (in mm). Body: ♂ 10, ♀ 9.5–10.5; body with wings: ♂ 21.5, ♀ 22.5–24; pronotum: ♂ 3.2, ♀ 3–3.2; tegmina: ♂ 16.5, ♀ 17–18.5; hind femora: ♂ 9.2, ♀ 10–10.5; ovipositor 7–7.3.

COMPARISON. The new species differs from the other species of this subgenus in the following characters: from *P. sundaica* (Kästner, 1932), in a narrower posteromedian notch of the male last abdominal tergite, concave hind edge of the male epiproct in the dorsal view, and the presence of three (not two) long apical lobules on the male cercus; from *P. parallela* Ingrisch, 2006, in spotted tegmina, the presence of a pair of posterolateral spine-like projections on the male epiproct, and spine-like (not widely lobe-like) lobules of the male cercal apex; from *P. bella* Gorochov, 2008, in a wider distal part of the male epiproct, three (not two) long lobules at the male cercal apex, and the male genital sclerite without distinct posteromedian notch; from *P. picta*, in a clearly different shape of the both epiproct and cercal apex in male (see Figs 8–10 and 18–20), as well as in the dorsal sclerite of male genitalia having a pair of distinct finger-like spines; and from *P. raggei* (Bey-Bienko, 1971), in the absence of light median area dividing dark spot on hind part of pronotal disc into a pair of dark stripes, completely light legs, and the female genital plate almost round (not acutely triangular) in the ventral view.

ETYMOLOGY. The name of this species is given after its male cercal apex having spine-like lobules.



Figs 27–36. *Pseudoteratura*: 27 – *P. picta* (Karny), male; 28–33 – *P. spinea* sp. n., male (28, 31–33) and female (29, 30); 34 – *P. parallela curup* subsp. n., female; 35 – *P. bella lambir* subsp. n., female; 36 – *P. mima* sp. n., female. Head and pronotum from above (27–30, 34–36); sclerites of genitalia from above (31), from below (32), and from side (33).

***Pseudoteratura* (*Pseudoteratura*) *parallela curup* Gorochov, subsp. n.**
Figs 24, 34, 40

MATERIAL. Holotype – ♀, **Indonesia**: Sumatra I., Bengkulu Prov., environs of Curup Town (not far from Bengkulu City), 03° 28–29' S, 102° 31–38' E, 1000–1500 m, on leaf of small tree in secondary forest at night, 24.IV–2.V 2009, A. Gorochov, M. Berezin, E. Tkatsheva.

DESCRIPTION. Female. General appearance more or less similar to that of *P. spinea*, but with several important differences. Colouration light greenish with yellowish tinge, reddish yellow median stripe running from dorsum of rostrum between antennal cavities to hind part of anterior two thirds of pronotal disc (hind third of this disc light, i. e. its colour almost as in most part of body), dark brown eyes and anterior part of head rostrum, brown medial area on each scape, somewhat darkened (greyish) long distal part of antennae, almost light brown second antennal segment and proximal part of antennal flagellum as well as stripe on each tegmina along its anal edge (other darkened marks on tegmina absent; Figs 34, 40), and darkish areas on tarsi as in all previous congeners considered here. Rostrum of head with somewhat flattened and almost truncate apical part (Fig. 34); lateral pronotal lobes slightly lower than in *P. spinea* (see Figs 39 and 40); length of distal part of hind wing exposed behind tegminal apex 3.1 mm; ovipositor practically straight (clearly less curved than in *P. spinea*; Figs 39, 40); genital plate very similar to that of female of *P. spinea* in shape but with distinct median groove on hind half of this plate (Fig. 24); other parts of body also similar to those of *P. spinea*.

Male unknown.

Length (in mm). Body 12; body with wings 24; pronotum 3.3; tegmina 18.5; hind femora 10; ovipositor 8.

COMPARISON. This subspecies is very similar to nominotypical subspecies described from a more northern locality of Sumatra (Ingrisch, 2006: Si-Rambe, 2° 19' N, 99° 13' E), but it differs from the latter in the anterior part of rostral dorsum distinctly darker than the rest part of slightly darkened median stripe situated on the dorsum of head and pronotum, a more flattened and truncate (not conical) apical part of the head rostrum, and more rounded anterior half of the ventral edge of lateral pronotal lobes (in *P. p. parallela* stat. n., this half is almost straight). I cannot exclude that these subspecies are two different species: one of them is described only from a male, and another one, only from a female. The new taxon is distinguished from the other known congeners by a light (not spotted) hind part of the pronotal disc in combination with the absence of dark spots on tegmina and a characteristic shape of the female genital plate.

ETYMOLOGY. The subspecies is named after the Curup Town.

***Pseudoteratura* (*Pseudoteratura*) *bella lambir* Gorochov, subsp. n.**
Figs 25, 35, 41

MATERIAL. Holotype – ♀, **Malaysia**: Borneo I., Sarawak State, environs of Miri Town, Lambir Hills National Park, 100–300 m, on leaf of bush in primary forest

at night, 29.III–1.IV 2012, A. Gorochov, M. Berezin, E. Tkatsheva, I. Kamskov. Paratype – ♀, same data as for holotype.

DESCRIPTION. Female (holotype). General appearance more or less as in previous congeners considered here. However, colouration somewhat different (Figs 35, 41): general colour light greenish with yellowish tinge; reddish yellow stripe running from rostrum to hind part of pronotal disc weakly distinct (especially in distal half of pronotum), with slightly darkened (almost brown) apical part of rostrum, and with hind part of this stripe divided into a pair of narrow stripes by light median triangle; antennae with very distinct small dark brown spots on proximal and middle thirds of antennal flagellum (scape light) as well as with rather long greyish brown areas on distal part of this flagellum; tegmina with weak light brown stripe along anal edge and several distinct small brown spots on distal two thirds of rest tegminal part; legs with barely darkened small spots near tympana on fore tibiae, apical part of hind tibiae, and distal area of lobes on third segment of all tarsi. Structure of body (including shape of both rostrum and pronotum) almost as in *P. spinea*, but length of distal part of hind wing exposed behind tegminal apex 1.8 mm, genital plate with slightly more angular distal part and with low median keel on ventral surface (Fig. 25), and ovipositor clearly longer (Fig. 41).

Variation. Paratype with brownish spot on medial part of each scape.

Male unknown.

Length (in mm). Body 9–10; body with wings 21.5–22; pronotum 3.3–3.5; tegmina 16.5–17; hind femora 10–10.5; ovipositor 8.3–8.6.

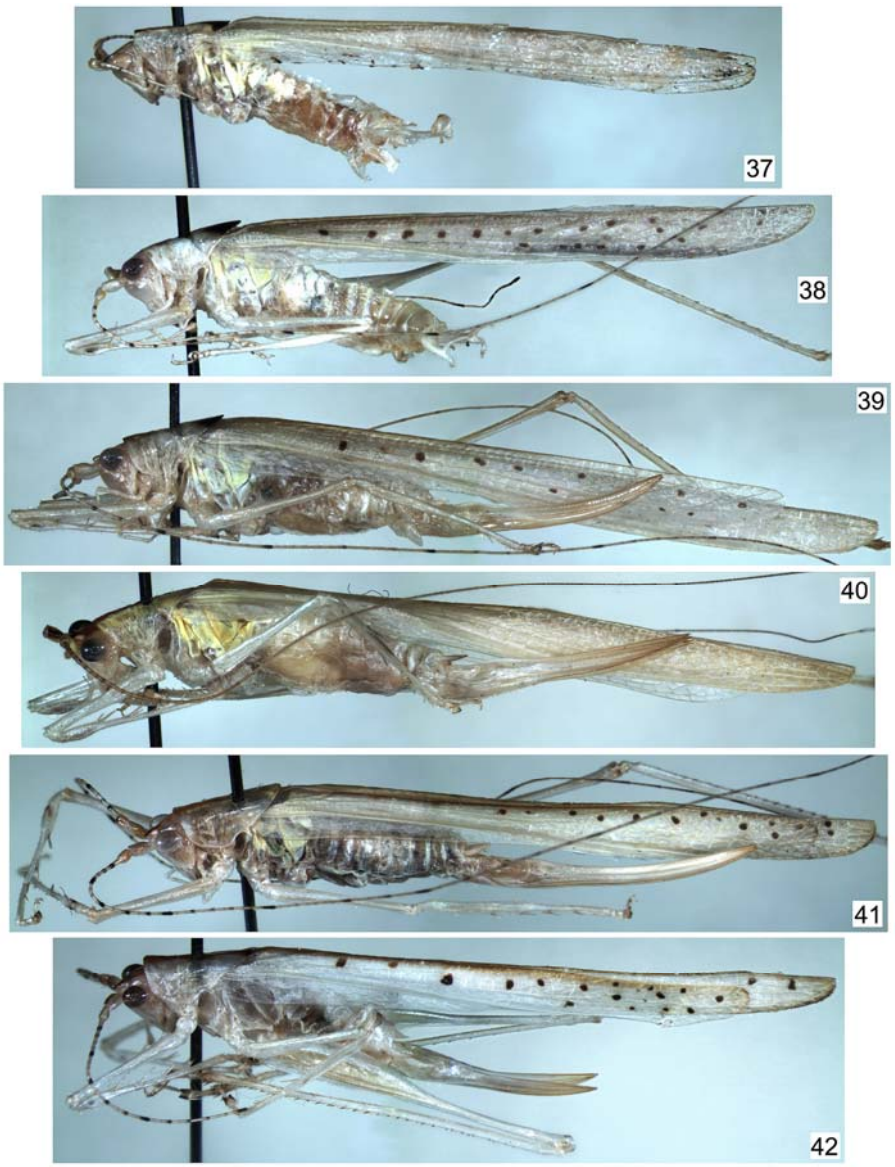
COMPARISON. The new subspecies is most similar to the nominotypical subspecies from Sabah State (*P. b. bella* stat. n.), but it is distinguished from the latter taxon by a less distinct reddish yellow stripe on the head dorsum, not darkened hind parts of such stripe on the pronotal disc, less numerous and smaller dark tegminal spots, the absence of dark dots on apices of the hind femora, and female genital plate with a median keel (not median grove) on its ventral surface (for comparison see Fig. 25 and Gorochov, 2008: fig. 25). From the other similar Bornean congeners, *P. b. lambir* differs in a distinctly lighter median stripe on the head dorsum and pronotal disc, almost conical rostrum, clearly not triangular female genital plate, and/or longer ovipositor.

ETYMOLOGY. The new subspecies is named after the Lambir Hills National Park.

***Pseudoteratura* (*Pseudoteratura*) *mima* Gorochov, sp. n.**
Figs 26, 36, 42

MATERIAL. Holotype – ♀, **Malaysia**: Borneo I., Sabah State, Tawau Hills National Park near Tawau City, 200–400 m, partly secondary / partly primary forest, on leaf of tree at night (canopy walkway), 14–20.V 2013, A. Gorochov, M. Berezin, E. Tkatsheva.

DESCRIPTION. Female. General appearance almost as in *P. bella lambir* but with small differences in colouration and structure of body: anterior part of rostral



Figs 37–42. *Pseudoteratura*, body from side: 37 – *P. picta* (Karny), male; 38, 39 – *P. spinea* sp. n., male (38) and female (39); 40 – *P. parallela curup* subsp. n., female; 41 – *P. bella lambir* subsp. n., female; 42 – *P. mima* sp. n., female.

dorsum not darkened (reddish yellow as rest of rostral dorsum); scapes completely light (as in holotype of *P. b. lambir*); pronotal disc with slightly darkened and rather narrow hind median spot (hind part of reddish yellow longitudinal stripe on this disc without any lighter median line or triangle; Fig. 36); small brown spots situated on anterior third of tegmina as well as on two distal thirds of them (Fig. 42); length of distal part of hind wing exposed behind tegminal apex 2.6 mm (Fig. 42); genital plate without distinct median keel or median groove on venter, with round distal part (Fig. 26); ovipositor clearly shorter (hind femur approximately 1.6 times as long as ovipositor, but this ratio 1.15–1.25 in *P. bella*).

Male unknown.

Length (in mm). Body 9; body with wings 22.5; pronotum 3.4; tegmina 16.5; hind femora 10.5; ovipositor 6.5.

COMPARISON. The new species is distinguished from *P. bella* by the longitudinal reddish yellow stripe of pronotal disc lacking any lighter median line or triangle in its hind part as well as a distinctly shorter ovipositor. From all the other congeners, *P. mima* differs in the same character of pronotal colouration (from *P. picta* and *P. raggei*), spotted tegmina (from *P. picta*, *P. parallela* and *P. subtilissima* Gorochov, 2008), a darkened hind part of the median reddish yellow stripe of pronotal disc (from *P. sundaica*), a much smaller darkened spot on the hind part of pronotal disc (from *P. spinea*), and the female genital plate not acutely triangular (from *P. raggei*) and without long hind lobules (from *P. sugonjaevi* (Gorochov, 1994) and *P. koncharangi* (Gorochov, 1998)); *P. mima* additionally differs from *P. picta*, *P. spinea* and *P. parallela* in a relatively shorter ovipositor (females of *P. sundaica* and *P. subtilissima* are unknown, but *P. sundaica* is described from Sumatra).

ETYMOLOGY. Name of this species is the Latin word “mima” (mimic actress) given for its similarity to *P. bella*.

ACKNOWLEDGEMENTS

This work is supported by the Presidium of the Russian Academy of Sciences (Program “Biosphere origin and evolution of geo-biological systems”).

REFERENCES

Gorochov, A.V. 2011a. Taxonomy of the katydids (Orthoptera: Tettigoniidae) from East Asia and adjacent islands. Communication 1. *Far Eastern Entomologist*, 220: 1–13.

Gorochov, A.V. 2011b. Taxonomy of the katydids (Orthoptera: Tettigoniidae) from East Asia and adjacent islands. Communication 2. *Far Eastern Entomologist*, 227: 1–12.

Gorochov, A.V. 2011c. Taxonomy of the katydids (Orthoptera: Tettigoniidae) from East Asia and adjacent islands. Communication 3. *Far Eastern Entomologist*, 236: 1–13.

Gorochov, A.V. 2012a. Taxonomy of the katydids (Orthoptera: Tettigoniidae) from East Asia and adjacent islands. Communication 4. *Far Eastern Entomologist*, 243: 1–9.

Gorochov, A.V. 2012b. Taxonomy of the katydids (Orthoptera: Tettigoniidae) from East Asia and adjacent islands. Communication 5. *Far Eastern Entomologist*, 252: 1–26.

Gorochov, A.V. 2013a. Taxonomy of the katydids (Orthoptera: Tettigoniidae) from East Asia and adjacent islands. Communication 6. *Far Eastern Entomologist*, 259: 1–12.
Gorochov, A.V. 2013b. Taxonomy of the katydids (Orthoptera: Tettigoniidae) from East Asia and adjacent islands. Communication 7. *Far Eastern Entomologist*, 266: 1–24.
Gorochov, A.V. 2014. Taxonomy of the katydids (Orthoptera: Tettigoniidae) from East Asia and adjacent islands. Communication 8. *Far Eastern Entomologist*, 273: 1–14.
Ingrisch, S. 2006. Two new species of Xiphidiopsini (Orthoptera, Tettigoniidae, Meconematinae) from Sumatra in the collection of the Museo Civico di Storia Naturale "G. Doria", Genova. *Doriana*, 7(348): 1–8.
Karny, H. H. 1923. On Malaysian Katydids (Gryllacrididae and Tettigoniidae), from the Raffles Museum, Singapore. *Journal of the Malaysian Branch of the Royal Asiatic Society*, 1: 117–193, pl. 2.
Karny, H. H. 1924. VII. Prodromus der Malayischen Meconeminen. *Treubia*, 5(1-3): 105–136.
Redtenbacher, J. 1891. Monographie der Conocephaliden. *Verhandlungen der kaiserlich-königlichen zoologisch-botanischen Gesellschaft in Wien*, 41(2): 315–562.

© **Far Eastern entomologist (Far East. entomol.)** Journal published since October 1994.
Editor-in-Chief: S.Yu. Storozhenko
Editorial Board: A.S. Lelej, N.V. Kurzenko, M.G. Ponomarenko, E.A. Beljaev, V.A. Mutin, E.A. Makarchenko, T.M. Tiunova, P.G. Nemkov, M.Yu. Proshchalykin, S.A. Shabalin
Address: Institute of Biology and Soil Science, Far East Branch of Russian Academy of Sciences, 690022, Vladivostok-22, Russia.
E-mail: entomol@ibss.dvo.ru web-site: http://www.biosoil.ru/fee