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TAXONOMY OF THE KATYDIDS (ORTHOPTERA: TETTIGONIIDAE) FROM EAST ASIA AND ADJACENT ISLANDS. COMMUNICATION 3

A. V. Gorochov

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

A new genus, six new species and a new subspecies of the tribe Meconematini (*Sumatropsis spitsini* **gen. et sp. n.**, *S. longipennis* **sp. n.**, *Xiphidiopsis symmetrica* **sp. n.**, *X. brevifurca* **sp. n.**, *X. angustifurca* **sp. n.**, *Xizicus daedalus* **sp. n.**, *Chandozhinskia bivittata vietnamica* **subsp. n.**) are described from Indonesia, Vietnam and Malaysia. *Xiphidiopsis amnicola* Gorochov, 1998 and *Ch. b. bivittata* (Bey-Bienko, 1957), **comb. n.** are recorded from Vietnam for the first time. Previously unknown male of *Xizicus hue* Gorochov, 2005 is described.

KEY WORDS: Orthoptera, Tettigoniidae, Meconematinae, Meconematini, new taxa, Indonesia, Vietnam, Malaysia.

А. В. Горохов. Таксономия кузнечиков (Orthoptera: Tettigoniidae) из Восточной Азии и соседних островов. Сообщение 3 // Дальневосточный энтомолог. 2011. N 236. С. 1-13.

Из Индонезии, Вьетнама и Малайзии описаны новый род, 6 новых видов и новый подвид (*Sumatropsis spitsini* **gen. et sp. n.**, *S. longipennis* **sp. n.**, *Xiphidiopsis symmetrica* **sp. n.**, *X. brevifurca* **sp. n.**, *X. angustifurca* **sp. n.**, *Xizicus daedalus* **sp. n.**, *Chandozhinskia bivittata vietnamica* **subsp. n.**). Для Вьетнама впервые указаны *Xiphidiopsis amnicola* Gorochov, 1998 и *Ch. b. bivittata* (Bey-Bienko, 1957), **comb. n.** Дано описание ранее неизвестного самца *Xiphidiopsis hue* Gorochov, 2005.

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

INTRODUCTION

This communication is third one from the series of works containing mainly the descriptions of new taxa of the Indo-Malayan Tettigoniidae. In the first and second communications, the descriptions of new taxa from the subfamilies Phaneropterinae and Conocephalinae as well as from the genus *Euanisous* Heb. (Meconematinae: Meconematini) were published (Gorochov, 2011a, b). The third communication is a continuation of my study of Meconematini. The material studied are collected by Russian entomologists and deposited in the Zoological Institute of RAS, St. Petersburg.

DESCRIPTIONS OF NEW TAXA

Subfamily Meconematinae

Tribe Meconematini

Genus *Sumatropsis* Gorochov, gen. n.

TYPE SPECIES. *Sumatropsis spitsini* sp. n.

DIAGNOSIS. General appearance similar to that of genus *Xiphidiopsis* (head high; its face slightly oblique in profile; rostral tubercle short, almost conical, with narrowly rounded apex, and with slight and very narrow median groove on dorsal surface; pronotum with rather high lateral lobes, with distinct humeral notches, and with elongate and rather low hind lobe; legs with both tympana opened; all wings long or slightly shortened, but extending behind abdominal apex; male epiproct small and not fused with other structures; ovipositor more or less long and almost straight, with gradually narrowing distal part, with acute apex of dorsal valves, and with small and slight hook at apex of ventral valves), however hind femora with both apical lobules in shape of short acute spines (Figs 1, 9), male last abdominal tergite with hind median process divided into four elongate lobules (two dorsal and two ventral), male cerci strongly curved in horizontal plane and with large medial lamellar lobes as well as with a few additional processes (Figs 2–4), male genital plate not long and with small styles separated from each other by moderately wide interspace (Fig. 5), male genitalia with distinct sclerotized structures (Figs 6, 7).

INCLUDED SPECIES. Type species and *S. longipennis* sp. n.

COMPARISON. Differences of the new genus from *Xiphidiopsis* are listed above. From all the other similar genera, it clearly differs in the following combination of characters: head with weakly oblique face and conical rostral tubercle, pronotum high and with distinct humeral notches and elongate hind lobe, hind femora with spine-like apical lobules, all wings more or less long, male last abdominal tergite with median process divided into four lobules, and male genitalia with sclerotized structures.

Sumatropsis spitsini Gorochov, sp. n.

Figs 1–7

MATERIAL. Holotype – ♂, **Indonesia**: Southern Sumatra, Bengkulu Prov., environs of Curup Town (not far from Bengkulu City), 03° 28–29' E, 102° 31–38' E,

1000-1500 m, partly primary / partly secondary forest, on leave of bush near small brook, at night, 24.IV-2.V 2009, A. Gorochov, M. Berezin, E. Tkatsheva. Paratype – ♀, same data.

DESCRIPTION. Male. Coloration of body light greenish with light brown apical edge of proximal segments of antennal flagellum, brownish both apex of maxillary palpi and longitudinal stripe on spines of fore and middle tibiae (hind tibiae missing), brown spots on middle part of antennae and on distal parts of third tarsal segments, small dark brown spot on each apical lobule of hind femora (Fig. 1), and almost completely darkened distal part of antennae. Hind pronotal lobe covering most part of tegminal stridulatory apparatus; tegmina reaching distal 1/5 of hind femora; hind wings hardly not reaching tegminal apex; median process of last abdominal tergite with very deep notches between its lobules; dorsal lobules of this process rather narrow, but ventral ones with distal part somewhat widened and lamellar (Figs 2-4); ventral parts of last abdominal tegite with almost hook-like projections directed backwards and medially (Figs 3, 4); cerci with two large lamellar medial lobes, short medial projection before them, almost spine-like posterolateral lobule, and two large tubercles on ventral surface (Figs 2, 3); genital plate slightly widening from base to distal 1/4, distinctly narrowing in distal 1/4, and with rounded apex between small styles (Figs 3–5); sclerotized structures of genitalia as in Figs 6, 7.

Female. Coloration and structure of body as in male, however tegmina without stridulatory apparatus, hind wings reaching apex of tegmina (but not exposed behind them), and abdominal tergites and cerci simple: tergites without processes and projections; cerci rather narrow, spindle-shaped. Hind tibiae with light brown spines having yellowish basal part; shape of genital plate not very clear (this plate deformed), probably similar to that pictured in Figs 10 and 11; ovipositor moderately long (hind femur approximately 1.7 times as long as ovipositor).

Length (in mm). Body: ♂ 12.2, ♀ 9; body with wings: ♂ 14.5, ♀ 15.5; pronotum: ♂ 4, ♀ 3.9; tegmina: ♂ 10.5, ♀ 11.5; hind femora: ♂ 10.9, ♀ 12; ovipositor 7.

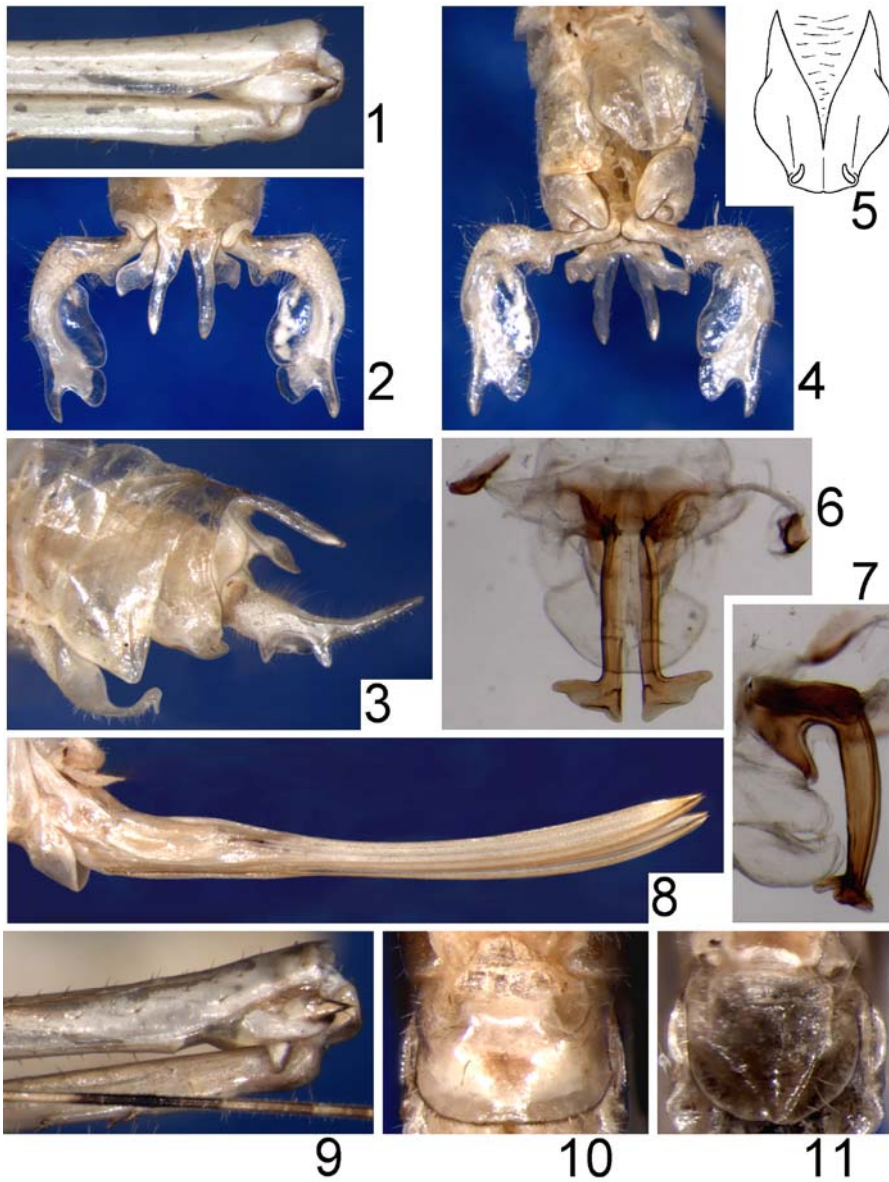
COMPARISON. Differences from all the known species are given in the generic comparison, and differences from a new congener are presented in its description.

ETYMOLOGY. The species is named in honor of V. V. Spitsin, Director General of the Moscow Zoo, Academician of the Russian Academy of Natural Sciences, Chairman of the Eurasian Regional Association of Zoos and Aquariums, for his big help in organization of field trips in Indonesia and some other tropical countries, and in connection with his seventy years anniversary.

Sumatropsis longipennis Gorochov, sp. n.

Figs 8–11

MATERIAL. Holotype – ♀, **Indonesia**: Southern Sumatra, Lampung Prov., National park Bukit Barisan Selatan, 15-20 km NE of Krui Town, Kubu Prahu Camp, 05° 04.341' S, 104° 03.093' E, ~600 m, primary forest, at light, 18-19.IV 2009, A. Gorochov, M. Berezin, E. Tkatsheva. Paratype – ♀, same province and park as well as collectors, but: 20-30 km WNW of Kotaagung Town, environs of Sukaraja Vill., 05° 30-31' S, 104° 25-27' E, ~600 m, primary forest, on leave of tree, at night, 14-18.IV 2009.



Figs 1-11. *Sumatropsis* gen. n. 1-7 – *S. spitsini* sp. n., male; 8-11 – *S. longipennis* sp. n., female. Distal part of hind femur from side (1, 9); abdominal apex from above (2); same with genital plate from side (3) and from below (4); this genital plate from below, schematic (5); sclerites genitalia from above (6) and from side (7); ovipositor with genital plate from side (8); female genital plate from below (10, 11).

DESCRIPTION. Female (holotype). Coloration and structure of body as in *S. spitsini* (including shape and size of spine-like lobules at apex of hind femora; Fig. 9), but fore femora with distinct brown spot on each apical lobule, fore tibiae with light brown small areas near tympana and brownish tympanal membranes, tegmina with a few weakly darkened dots on distal part of lateral field, tegminal apex reaching apex of hind femora, hind wings distinctly exposed behind tegmina (length of their exposed part 1 mm), genital plate with roundly truncate hind part (Fig. 10), and ovipositor clearly longer (hind femur approximately 1.4 times as long as ovipositor; Fig. 8).

Variations. Paratype distinguished from holotype by hardly shorter hind wings (length of their exposed part 0.8 mm) and ovipositor (hind femur approximately 1.5 times as long as ovipositor), as well as by slightly less truncate hind part of genital plate (Fig. 11).

Male unknown.

Length (in mm). Body 8.5–11; body with wings 19.5–21.5; pronotum 4–4.4; tegmina 15–16; hind femora 13.5–14.5; ovipositor 9.2–10.5.

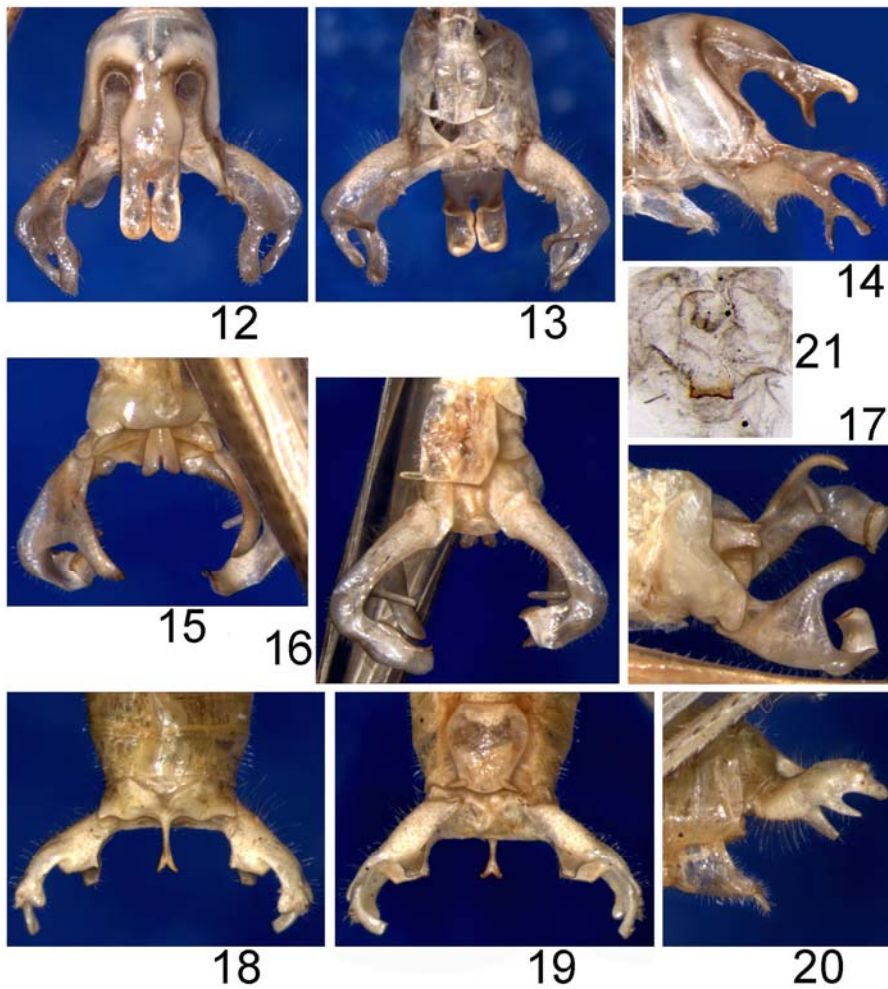
COMPARISON. Differences of the new species from *S. spitsini* are listed above (see the description of *S. longipennis*).

***Xiphidiopsis (Xiphidiopsis) symmetrica* Gorochoy, sp. n.**

Figs 12–14

MATERIAL. Holotype – ♂, **Vietnam**: Cao Bang Prov., Trung Khanh Distr., Natural reserve Trung Khanh, forest, 5-11.IX 2009, S. Ryabov, N. Orlov.

DESCRIPTION. Male. Coloration of body light greenish with brown spot on posteromedial part of tegminal stridulatory apparatus, light brown stripe on spines of fore and middle tibiae, dark brown spot on each apical lobule of hind femora, slightly darkened spines of hind tibiae, and brownish third segment of fore and middle tarsi as well as small spots between R and Cu in proximal half of tegmina and between branches of RS in distal half of tegmina (antennal flagellum and distal part of hind leg missing). Structure of head, thorax and legs typical of *Xiphidiopsis* s. str. (including rounded shape of apical lobules of hind femora); most part of tegminal stridulatory apparatus covered by hind pronotal lobe; tegminal apex reaching apex of hind femora; hind wings distinctly exposed behind tegmina (length of their exposed part 1.25 mm); hind median process of last abdominal tergite large, symmetrical, divided into a pair of distal lobes by narrow median notch reaching almost middle of this process, having a pair of additional distal lobules situated under previous lobes, and limited laterally by a pair of deep notches of this tergite partly occupied by membranes (Figs 12–14); epiproct and paraprocts very small (narrowly elongate and shortly rounded respectively), well separated from all other sclerites; cerci symmetrical and with three distal branches and one ventroproximal projection (these branches and projection not widened; Figs 12–14); genital plate rather small, almost rectangular, but with rounded apical edge between moderately long styles (these styles situated rather far from each other; Fig. 13); genitalia completely membranous.



Figs 12–21. *Xiphidiopsis* Redt., male. 12–14 – *X. symmetrica* sp. n.; 15–17 – *X. brevifurca* sp. n.; 18–21 – *X. angustifurca* sp. n. Distal part of abdomen from above (12, 15, 18), from below (13, 16, 19), from side (14, 20), and from side and slightly above (17); sclerotized structure of genitalia from above (21).

Female unknown.

Length (in mm). Body 13; body with wings 22; pronotum 3.8; tegmina 18; hind femora 10.2.

COMPARISON. The new species is most similar to *X. beybienkoi* Gor. from Central Vietnam in the shape and size of notches of male last abdominal tergite near its median process, but distinguished by the symmetrical shape of this process, wider middle part of this process, and symmetrical male cerci. From *X. fischerwaldheimi*

Gor. from Northern Vietnam and *X. amnicola* Gor. from Cambodia also having these notches rather deep, the new species differs in the longer above-mentioned process divided into four lobes or lobules, and from all the other members of this subgenus, in the last character as well as symmetrical male abdominal apex and rather narrow branches of male cerci.

***Xiphidiopsis (Xiphidiopsis) brevifurca* Gorochov, sp. n.**

Figs 15–17

MATERIAL. Holotype – ♂, **Indonesia:** Southern Sumatra, Lampung Prov., National park Bukit Barisan Selatan, 20–30 km WNW of Kotaagung Town, environs of Sukaraja Vill., 05° 30–31' S, 104° 25–27' E, ~600 m, primary forest, on leave of bush, at night, 14–18.IV 2009, A. Gorochov, M. Berezin, E. Tkatsheva.

DESCRIPTION. Male. Coloration and structure of body similar to those of *X. symmetrica*, but antennal flagellum as well as fore femur and fore tibia (excepting tibial spines) almost uniformly light greenish, third tarsal segments of all tarsi brownish, lateral field of tegmina also uniformly light greenish, last abdominal tergite without distinct notches near its hind median process, this symmetrical process not large and separated from rest of latter tergite by transverse fold (however presence of this fold may be a result of deformation of this tergite in dry specimen), distal part of this process divided into only a pair of smaller lobes (ventral lobules absent), symmetrical cerci with two lamellar branches (one of these branches more widened and curved) as well as with spine-like medial projection (Figs 15–17), and genital plate with almost straight hind edge between styles (Fig. 16).

Female unknown.

Length (in mm). Body 11; body with wings 19.5; pronotum 3.3; tegmina 15.8; hind femora 9.

COMPARISON. The new species is similar to *X. gracilis* Sanger et Helfert (Thailand), *X. amnicola*, *X. fischerwaldheimi* and *X. symmetrica* in the symmetrical male cerci, but distinguished from the first and second species by the hind median process of male last tergite distinctly bifurcate and by the presence of spine-like medial projection on the male cerci; from the third species, by the longer and more curved male cerci and their branches as well as by the absence of distinct ventral denticle between lateral lobes of the above-mentioned process; and from the fourth species, by this process smaller and lacking ventral lobules in distal part as well as by its posterolateral lobes shorter. From all the other true members of this subgenus, the new species differs in the abdominal apex of male symmetrical and/or hind median process of male last tergite distinctly bifurcate. And from *X. kraussi* Karny (Java) possibly belonging to *Xiphidiopsis* s. str., and having this process bifurcate and male cerci probably symmetrical, *X. brevifurca* differs in the above-mentioned process much smaller and in the male cerci somewhat longer and with their distal branches less approximate.

***Xiphidiopsis (Xiphidiopsis) angustifurca* Gorochov, sp. n.**

Figs 18–21

MATERIAL. Holotype – ♂, **Malaysia:** Malacca, Pahang State, Fraser's Hill near border with Selangor State (17-18 km SW of Raub Town), 1000-1300 m, primary forest, on leave of bush, at night, 15-23.IV 2010, A. Gorochov, M. Berezin, E. Tkatsheva.

DESCRIPTION. Male. Coloration and structure of body similar to those of *X. symmetrica*, but antennal flagellum with light brown hind edge of segments and sparse brown and dark brown spots, all tarsi as well as spines of fore and middle tibiae practically uniformly light greenish, tegmina with small light brown spots only in middle and distal parts of lateral field, last abdominal tergite without distinct notches near its hind median process, this symmetrical process very narrow and not separated from rest of latter tergite by any fold, distal part of this process divided into only a pair of small hooks distinctly narrower than lobes of this process in *X. brevifurca* (Figs 18, 20), symmetrical cerci with five rather short and not lamellar projections (dorsoproximal one keel-like; two apical projections lobule-like and different in length; two ventral projections more or less equal in length, but distal one almost spine-like, and proximal one somewhat flattened and with truncate apex; Figs 18–20), genital plate with hind part intermediate between those of *X. symmetrica* and *X. brevifurca* (Fig. 19), and genitalia with small and weakly sclerotized structure in shape of transverse keel having very small denticles (Fig. 21).

Female unknown.

Length (in mm). Body 12.5; body with wings 23.5; pronotum 3.6; tegmina 18.5; hind femora 9.5.

COMPARISON. The new species is similar to *X. fischerwaldheimi* in the symmetrical male cerci with only short projections as well as to *X. brevifurca* in the male last tergite having the bifurcate hind median process and lacking distinct notches near this process, but it differs from the first species in the above-mentioned process clearly narrower and with the much shorter and hooked distal lobes, and from the second species, in the projections of male cerci distinctly shorter and less lamellar than cercal branches in male of *X. brevifurca*. From *X. symmetrica*, the new species differs in the characters listed in its description, and from all the other species of this subgenus, in the male abdominal apex symmetrical, male cerci with the rather short projections, and hind median process of male last tergite distinctly narrower and/or clearly bifurcate.

***Xiphidiopsis (Xiphidiopsis) amnicola* Gorochov, 1998**

MATERIAL. 1 ♂, **Vietnam:** Dong Nai Prov., National park Cat Tien, 3-14.XII 2010, L. Anisyutkin, A. Anichkin.

NOTE. This species was described from eastern part of Cambodia (Gorochov, 1998). Now it is indicated for Vietnam at the first time.

Xizicus (Xizicus) daedalus Gorochov, sp. n.

Figs 22–29

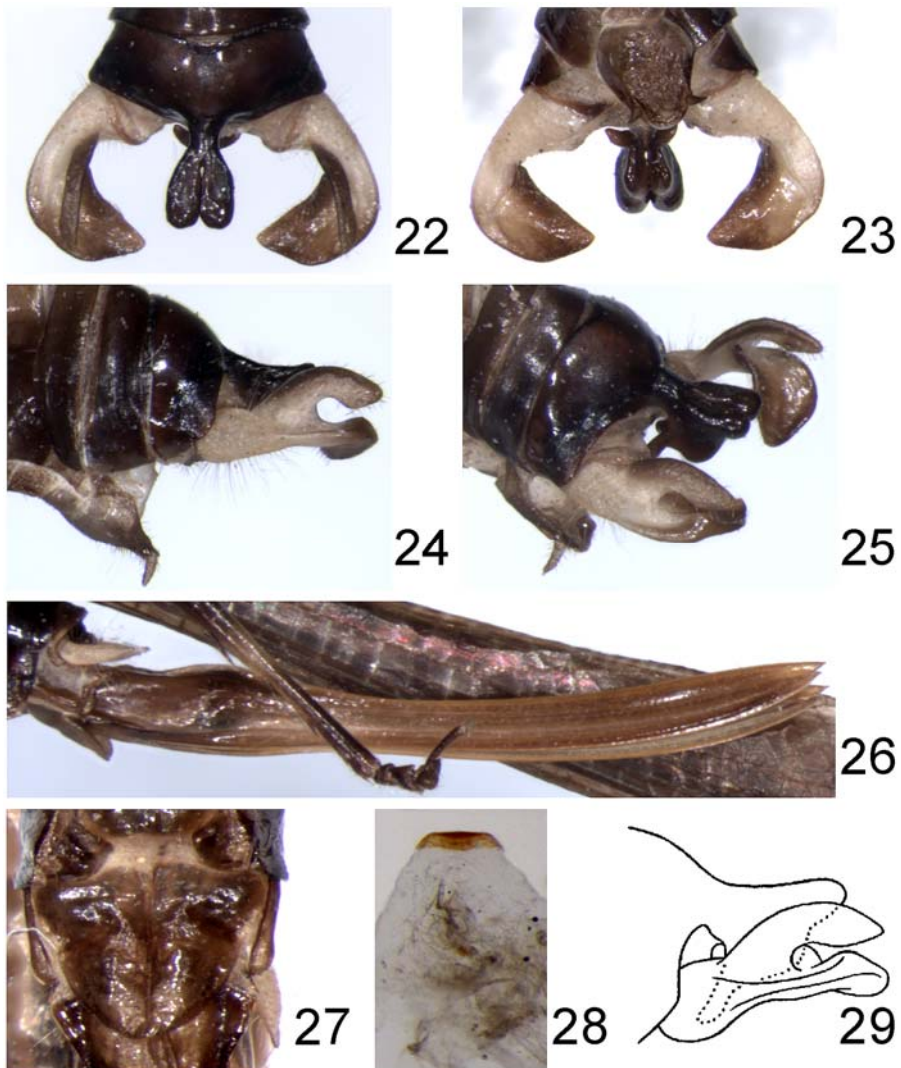
MATERIAL. Holotype – ♂, **Vietnam:** Cao Bang Prov., Trung Khanh Distr. (near border with China), Natural reserve Trung Khanh, forest, 5-11.IX 2009, S. Ryabov, N. Orlov. Paratype – ♀, same data.

DESCRIPTION. Male. Coloration of body variegate: head dark brown with light brown palpi and a few narrow longitudinal stripes on dorsum as well as with brown face of epicranium and rest of mouthparts (antennal flagellum missing); prothorax light brown with brown pronotal disc and almost yellowish pronotal lateral lobes; other parts of thorax and also hind tergites of abdomen dark brown; rest of abdomen from brown to light brown, but with most part of cerci yellowish (Figs 22–25); fore legs dark brown with light brown middle part of tibiae (middle legs missing); hind femur yellowish with dark brown base and wide transverse band not far from it, brown distal half of ventral surface and dorsoapical spot, and light brown dorsal longitudinal stripe between this spot and above-mentioned band (this stripe separated from latter spot and band by short light interspaces); rest of hind leg brown with light brown proximal part of tibia and dark brown tibial apex and tarsus; tegmina grayish brown with very light brown (almost yellowish) dorsal field, transparent large areas on proximal half of lateral field, whitish crossveins in *M-Cu* area and some of crossveins in other areas of lateral field; hind wings grayish, semitransparent. Structure of body typical of this subgenus (Gorochov, 1993, 1998) including cerci and apical sclerotization of genitalia (Figs 22–25, 28), however hind processes of last abdominal tergite large (long and high), each of them with elongate and rather narrow ventral lobule directed mainly downwards (but also slightly forwards and slightly laterally; Figs 22, 23, 25, 29), and genital plate with rather elongate styles similar to those of *X. fascipes* (Figs 23, 24).

Female. General appearance as in male, but middle femur dark brown with light brown spot near its apical part, middle tibia and middle tarsus similar to those of fore leg in coloration, and cerci completely yellowish. Genital plate and ovipositor practically indistinguishable from those of *X. fascipes* (Figs 26, 27).

Length (in mm). Body: ♂ 11, ♀ 9; body with wings: ♂ 17.5, ♀ 18.5; pronotum: ♂ 3.4, ♀ 3.4; tegmina: ♂ 13.8, ♀ 15; hind femora: ♂ 11.7, ♀ 11.5; ovipositor 8.6.

COMPARISON. The new species is clearly distinguished from the other true and possible representatives of *Xizicus* s. str. by the following characters: from *X. fascipes* (B.-Bien.) and *X. juxtafurca* (Xia et Liu) (Southern China) as well as from *X. proximus* Gor. (Northern Vietnam) and *X. kaltenbachi* Sanger et Helfert (Thailand), by the higher hind processes of male last tergite and presence of elongate and narrow ventral lobule on each of these processes; and from *X. ikonnikovi* Gor. (Northern Vietnam), by the variegate coloration of body and roundly angular apex of female genital plate. It is necessary to note that belonging of the latter species, *X. juxtafurca* and *X. kaltenbachi* to this subgenus is questionable judging by their descriptions (Xia & Liu, 1988; Gorochov, 1993; Helfert & Sanger, 2006).



Figs 22–29. *Xizicus daedalus* sp. n. 22 – distal part of male abdomen from above; 23 – same from below; 24 – same from side; 25 – same from side and slightly from above; 26 – female abdominal apex (with ovipositor) from side; 27 – female genital plate from below; 28 – sclerotized structure of male genitalia from above; 29 – hind process of male last tergite with cercus from side, schematic (parts of this process laterally covered by cercus are outlined by line from dots).

***Xizicus (Eoxizicus) hue* Gorochov, 2005**

Figs 30–32

MATERIAL. 2 ♂, 1 ♀, **Vietnam:** Thua Thien Hue Prov., 40 km of Hue City, National park Bach Ma, 22-23.XI 2008, V. Bezborodov.

DESCRIPTION. Male (novus). Coloration of body light greenish with narrow brown stripe along each lateral edge of pronotal disc, very narrow light brown stripe along anal edge of each tegmen (from stridulatory apparatus to distal 1/5 of tegmen), and almost dark brown very small dot at apex of each apical lobule of hind femora and majority of dorsal spines of hind tibiae. Structure of body typical of this subgenus (including length of tegmina almost reaching hind tarsi and of hind wings distinctly exposed behind tegminal apices), but last abdominal tergite with a pair of distinct processes on posteromedian part, latter part separated from rest of this tergite by arcuate furrow, processes of this part situated rather far from each other, cerci rather short and weakly curved upwards, ventromedial cercal lobe rounded and lamellar, posterolateral (posterodorsal) part of cerci with short finger-like upper projection and very short rounded lobule under (near) it (Figs 30–32); epiproct and paraprocts small and isolated; genital plate as in Figs 31, 32; genitalia completely membranous.

Female. General appearance similar to that of male, but very narrow light brown stripe along anal edge of tegmina running from tegminal base; ovipositor typical of *Eoxizicus*; genital plate as in holotype (see Gorochov, 2005: Figs 9, 10), but with hardly deeper hind median notch.

Length (in mm). Body: ♂ 12–14.5, ♀ 11; body with wings: ♂ 23–24.5, ♀ 26.5; pronotum: ♂ 3.9–4.1, ♀ 4.2; tegmina: ♂ 18–19.5, ♀ 22.5; hind femora: ♂ 10–10.5, ♀ 11.2; ovipositor 10.5.

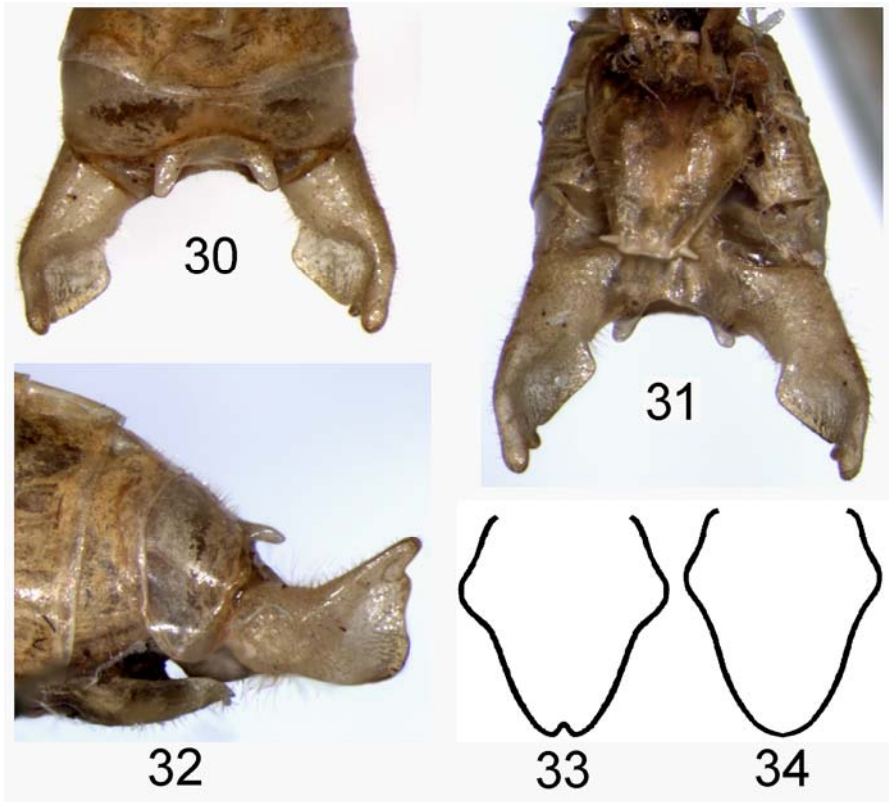
NOTE. This species was described for a single female from the same park (Gorochov, 2005). Correctness in the original determination of subgeneric position of this female shows that *Eoxizicus* Gor. may be also distinguishable from all the other subgenera of *Xizicus* Gor. by the characteristic coloration of body and saddle-like female genital plate.

***Chandozhinskia bivittata vietnamica* Gorochov, subsp. n.**

Fig. 33

MATERIAL. Holotype – ♀, **Vietnam:** Bac Thai Prov., Phu Luong Distr., environs of Quang Chu Vill., 300 m, 15-23.IV 1986, A. Gorochov. Paratypes: 1 ♂, same data; 1 ♂, 1 ♀, Vietnam, Vinh Phu Prov., environs of Tam Dao Vill., 800-1000 m, 17-31.V 1995, A. Gorochov.

DESCRIPTION. Female. Coloration and structure of body (including shape of ovipositor) almost indistinguishable from those of *Ch. b. bivittata* (B.-Bien.), **comb. n.** (see Bey-Bienko, 1957), but genital plate with distinct apical notch (in latter subspecies, this plate without any notch at apex; for comparison see Figs 33, 34).



Figs 30–34. *Xizicus* Gor. and *Chandozhinskia* Gor. 30–32 – *X. hue* Gor.; 33 – *Ch. bivittata vietnamica* subsp. n.; 34 – *Ch. b. bivittata* (B.-Bien.). Male abdominal apex from above (30); same with genital plate from below (31) and from side (32); outlines of female genital plate from below (33, 34).

Male. All characters studied practically identical to those of male of nominotypical subspecies (Bey-Bienko, 1957; Gorochov, 1993) and not suitable for separation of these subspecies.

Length (in mm). Body: ♂ 10–10.5, ♀ 10–11; body with wings: ♂ 15.5–17, ♀ 19–20; pronotum: ♂ 3.1–3.3, ♀ 3.2; tegmina: ♂ 13–14, ♀ 16–16.5; hind femora: ♂ 7–7.7, ♀ 8–8.3; ovipositor 5.7–5.9.

COMPARISON. The new subspecies may be distinguished from *Ch. b. bivittata* (distributed in more northern regions) only by the above-mentioned character of female genital plate.

NOTE. All these specimens were collected in forest glades. Majority of them are indicated as *Ch. bivittata* in one of the previous paper (Gorochov, 1993).

***Chandozhinskia bivittata bivittata* (Bey-Bienko, 1957)**

Fig. 34

MATERIAL. 3 ♂, 5 ♀, **Vietnam**: Lao Cai Prov., Sa Pa Distr., Fan Si Pan Mt., 1900-2500 m, 20.IV-9.V 1999, N. Orlov.

NOTE. This subspecies was described from Southern China (Bey-Bienko, 1957). Here it is recorded from Vietnam (from one of its most northern provinces situated near the border with China) for the first time. These specimens differ from Chinese representatives in the slightly smaller size of body only.

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SHORT COMMUNICATION

D. S. Aristov¹, S. Yu. Storozhenko². THE TAXONOMIC POSITION OF THE GENUS *PARABLATTOGRYLLUS* STOROZHENKO, 1988 (INSECTA) FROM THE CRETACEOUS OF RUSSIA. – Far Eastern Entomologist. 2011. N 236: 14-16.

Summary. The holotype of *Parablattogryllus obscurus* Storozhenko, 1988 from the Lower Cretaceous locality Baissa in East Siberia is re-described and illustrated. The genus *Parablattogryllus* Storozhenko, 1988 is transferred from the family Blattogryllidae of the order Grylloblattida to the infraclass Polyneoptera as the genus of uncertain systematic position.

Key words: Insecta, Polyneoptera, *Parablattogryllus*, taxonomy, Cretaceous, Russia.

Д. С. Аристов¹, С. Ю. Стороженко². Систематическое положение рода *Parablattogryllus* Storozhenko, 1988 (Insecta) из мела России // Дальневосточный энтомолог. 2011. N 236. С. 14-16.

Резюме. Дано переописание голотипа *Parablattogryllus obscurus* Storozhenko, 1988 из нижнемелового местонахождения Байса в Восточной Сибири. Род *Parablattogryllus* Storozhenko, 1988 перенесен из семейства Blattogryllidae (отряд Grylloblattida) в инфракласс Polyneoptera в качестве таксона с неясным таксономическим положением.

INTRODUCTION

Parablattogryllus obscurus Storozhenko, 1988 was described from the Lower Cretaceous locality Baissa (Russia: Buryat Republic) in the family Blattogryllidae of the order Grylloblattida (Storozhenko, 1988). Originally it was misinterpreted as fore wing, but later considered as isolated hindwing (Huang et al., 2008). The re-examination of holotype of this species confirms the latter point of view. The wing-venation of *P. obscurus* is not typical for family Blattogryllidae (fore wings and hindwings of this family are characterized by *RS* closely parallel to *R*, by the base of *M* fused with *CuA*, and by presence of S-shaped cross-veins in the intercubital area). Moreover, the anal area in hindwing of *P. obscurus* is small, the membrane is dark, coriaceous and covered by plaits and wrinkles, which never observed in any known families of the order Grylloblattida, as well as in the other orders of the infraclass Polyneoptera (= Gryllones). Thus, the systematic position of *Parablattogryllus* Storozhenko, 1988 within the infraclass Polyneoptera is unclear. The real taxonomic location of this enigmatic genus may be interpreted only after collecting of new specimens with well preserved fore wings and body.

INFRACLASS POLYNEOPTERA

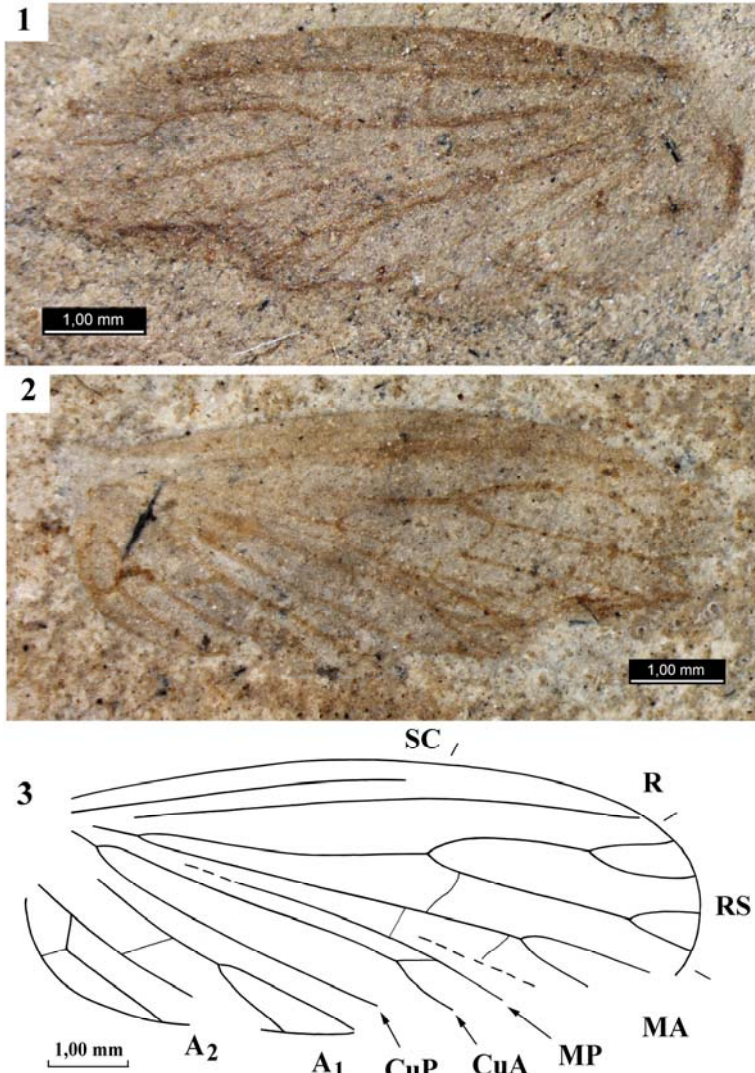
Genus *Parablattogryllus* Storozhenko, 1988

Parablattogryllus Storozhenko, 1988: 51; Storozhenko, 1998: 177; Huang et al., 2008: 21; Aristov, 2011: 60.

Type species: *Parablattogryllus obscurus* Storozhenko, 1988, by original designation.

DESCRIPTION. Medium size, probably brachypterous insects. Hindwing 2.5 times as long as wide, with convex anterior margin and broadly rounded apex. Width of costal area near the mid of wing equal to width of subcostal area. *RS* originated near the base of the wing, its base fused with *M*. *M* divided *MA* and *MP* near the basal quarter of wing. *CuA* and *CuP* simple. Anal field small. Cross-veins simple. Membrane coriaceous, with plaits and wrinkles; hindwing dark, especially around anterior margin.

COMPOSITION. Type species from the Lower Cretaceous of Russia.



Figs. 1-3. Hindwing of *Parablattogryllus obscurus* (holotype, PIN No. 1989/2497). 1 – positive imprint; 2 – negative imprint; 3 – reconstruction. Scale bar: 1 mm.

***Parablattogryllus obscurus* Storozhenko, 1988**

Figs 1–3

Parablattogryllus obscurus Storozhenko, 1988: 51, fig. 1i (holotype – positive and negative imprints of hindwing; Russia: Buryat Republic, Bauntovo District, left bank of the Vitim River downstream of the Baissa River, Baissa locality; Lower Cretaceous, Zaza Formation; in PIN; studied); Storozhenko, 1998: 177, fig. 449; Huang et al., 2008: 21; Aristov, 2011: 60.

MATERIAL. Holotype from Baissa locality.

LOCALITY AND HORIZON. Russia: Baissa locality; the Lower Cretaceous, Zaza Formation.

DESCRIPTION. *RS* with four branches. *MA* forked. Intermedial area with distinct wrinkle. *A*₁ forked. *A*₂ with two branches; basal branch angularly curved and connected with posterior margin of hindwing by simple cross-vein.

MEASUREMENTS. Length of hindwing 7.8 mm.

ACKNOWLEDGEMENTS

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Author's addresses:

- 1) Paleontological Institute RAS,
Profsoyuznaya str., 123, Moscow 117997, Russia.
E-mail: danil_aristov@mail.ru
- 2) Institute of Biology and Soil Science FEB
RAS, Vladivostok-22, 690022, Russia.
E-mail: storozhenko@ibss.dvo.ru

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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>