

New species and subspecies of the cricket genus *Gymnogryllus* Sauss.
(Orthoptera, Gryllidae, Gryllinae)
from South-East Asia and New Guinea

НОВЫЕ ВИДЫ И ПОДВИДЫ СВЕРЧКОВ РОДА *Gymnogryllus* Sauss.
(Orthoptera, Gryllidae, Gryllinae)
из Юго-Восточной Азии и Новой Гвинеи

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Ключевые слова: Orthoptera, Gryllidae, Gryllinae, *Gymnogryllus*, новые виды и подвиды, описания, Юго-Восточная Азия, Новая Гвинея.

Abstract. Two new species and a new subspecies from Indochina (*G. sylvestris* Gorochov, **sp.n.**, *G. vietnamensis longidens* Gorochov, **ssp.n.**, *G. obscurus* Gorochov, **sp.n.**), a new species and a new subspecies from Sonde Islands (*G. dinictis* Gorochov, **sp.n.**, *G. unexpectus trusmadi* Gorochov, **ssp.n.**), as well as a new species from New Guinea (*G. manokwari* Gorochov, **sp.n.**) are described. The status of the former subspecies *G. machairodus unexpectus* Gorochov et Kostia, 1999 is elevated to species level. Some new data on other species of this genus are given to compare with the new taxa described.

Резюме. Описаны два новых вида и новый подвид из Индокитая (*G. sylvestris* Gorochov, **sp.n.**, *G. vietnamensis longidens* Gorochov, **ssp.n.**, *G. obscurus* Gorochov, **sp.n.**), новые вид и подвид с Зондских островов (*G. dinictis* Gorochov, **sp.n.**, *G. unexpectus trusmadi* Gorochov, **ssp.n.**) и новый вид с Новой Гвинеи (*G. manokwari* Gorochov, **sp.n.**). Статус бывшего подвида *G. malayanus unexpectus* Gorochov et Kostia, 1999 поднят до видового. При сравнениях с описываемыми таксонами приведены новые данные по некоторым другим видам этого рода.

The genus *Gymnogryllus* Saussure, 1877 includes 23 species and subspecies distributed from Indo-Malayan region to Australia and may be divided into five species groups on base of structure of their male genitalia: (1) epiphallus is with a pair of spine-like medial processes which are situated near its apex and directed downwards, and ectoparameres are with the rather short and rounded upper lobe [*G. equinus* Gorochov, 2001 from Southern Malacca, *G. vietnamensis* Gorochov, 1992 and *G. sylvestris* sp. n. from Central Vietnam, *G. v. longidens* ssp.n. from Cambodia, *G. kuznetzovi* Gorochov, 1992 from Northern Vietnam, *G. obscurus* sp. n. from Northern Laos, *G. odo-*

nopetalus Xie et Zhang, 2003 and possibly *G. contractus* Liu, Yin et Liu, 1995 from Southern China; Figs 1–3, 10–15]; (2) ventral surface of epiphallic apical part is without any distinct projections or processes, and upper lobe of each ectoparamere is with the tusk-like process curved downwards [*G. machairodus* Gorochov, 1996 from «Banka, Vorderindien» (from India or nearest countries, but possibly from Bangka I. near Sumatra), *G. malayanus* Desutter-Grandcolas, 1996 from Malacca, *G. dinictis* sp.n. from Sumatra, *G. angustus* (Saussure, 1877) and *G. unexpectus unexpectus* Gorochov et Kostia, 1999, comb. n. from Java, *G. smilodon* Gorochov, 1996 and *G. u. trusmadi* ssp.n. from Borneo; Figs 4–9, 17–30]; (3) ventral surface of epiphallic apical part is with a pair of short angular projections or without any distinct projections or processes, and upper lobe of each ectoparamere is with the spine-like processes directed backwards [*G. brevicauda* Chopard, 1937 and *G. corroboree* Otte et Alexander, 1983 from Northern Australia, *G. pravdini pravdini* Gorochov, 1990 from Mollucan (=Maluku) Islands, *G. p. fidus* Gorochov, 2001 from New Guinea; Fig. 16]; (4) ventral surface of apical epiphallic part is without any distinct projections or processes, upper lobe of ectoparameres is rather short and rounded, and hind femora are with the large dark and light bands [*G. leucostictus* (Burmeister, 1838) described from Java and rather widely distributed in South-East Asia, *G. borneensis* Ichikawa, 1996 from Borneo]; (5) ventral surface of apical epiphallic part is without any distinct projections or processes, upper lobe of ectoparameres is rather short and rounded, but hind femora are almost unicolorous [*G. novaeguineae* Chopard, 1937 and *G. manokwari* sp.n. from New Guinea; Figs 31–33].

All the other species, included in this genus in the electronic catalogue of Orthoptera [Eades et al., 2010], are in need of an additional study for clarification of their generic position. For example, a few Indo-Malayan species (*Brachytrypus pulvillatus* Saussure, 1877 from Java, *G. birmanus* Chopard, 1969 from Myanmar, *G. brachyxiphus* Chopard, 1931 from Malacca) may really belong to *Gymnogryllus*, but some other Asiatic species (*Liogryllus ritsemae* Saussure, 1877 from Japan, *G. fascipes* Chopard, 1969 and *G. kashmirensis* Bhowmik, 1967 from India) as well as African species belong or possibly belong to the genus *Phonarellus* Gorochov, 1983 [Gorochov, 1983, 1996, 2001].

The present paper is based on material from the Zoological Institute, Russian Academy of Sciences, Saint-Petersburg (ZIN).

Gymnogryllus sylvestris Gorochov, **sp.n.**

Figs 1, 2, 10, 36, 37.

Material. Holotype, ♂, VIETNAM, prov. Gia Lai, ~20 km N of town Kannack, environs of vill. Buon Luoi, h-700–800 m a.s.l., road side in primary forest, at night during singing near burrow, 3–11.XI.1993, A. Gorochov (ZIN). Paratype, ♂, same data as for holotype (ZIN).

Description. Male (holotype). General appearance typical of this genus, see descriptions of different *Gymnogryllus* representatives [Gorochov, 1996, 2001]. Coloration of epicranium and pronotum very dark brown (almost blackish) with yellowish ocelli, brown (almost dark brown) area under median ocellus, and light brown small spots around eyes (near lateral ocelli and antennal cavities as well as on lower part of genae) and longitudinal spot on each lateral pronotal lobe along ventral edge of this lobe; other parts of body light brown with dark brown antennae and brown following marks: areas on upper part of clypeus and mandibles, large areas on femora (including oblique stripes on hind femora), most part of tibiae and hind tarsi, band on lateral tegminal field along its dorsal edge, large areas on dorsal tegminal field as well as on dorsal part of hind abdominal tergites and on anal plate. Tegmina weakly shortened, slightly not reaching abdominal apex; tegminal stridulatory area with three oblique veins (two longest of them almost parallel), S-shaped diagonal vein, and characteristic mirror (Figs 36, 37); apical tegminal area almost equal to stridulatory tegminal area in length; hind wings shortened, completely covered with tegmina. Genitalia (Figs 1, 2) very similar to those of *G. vietnamensis* and *G. equinus*, but median notch between ventral spine-like processes of epiphallallic apical part (if to see from behind) distinctly wider than in first species and, unlike in second species, not reaching dorsal edge of epiphallallic apical part (Fig. 10).

Variations. Paratype with small slight lightish (almost light brown) spot under median ocellus and a pair of narrow transverse dark red spots on pronotal disc.

Female unknown.

Length in mm. Body 32–34; pronotum 5.4–5.7; tegmina 20–21; hind femora 19.5–20.

Comparison. The new species differs from two most similar species (*G. vietnamensis* and *G. equinus*) in the almost blackish coloration of epicranium and pronotum, shortened wings, and characters of male genitalia listed above (in the description). From *G. contractus* and *G. odonopetalus*, the new species is distinguished by the less trans-

verse mirror of male tegmina (in these Chinese species, this mirror is distinctly transverse, but in *G. sylvestris*, its width is only insignificantly greater than its length). In one of previous papers [Gorochov, 2001], the new species was determined as *G. kuznetzovi* described from Vietnamese prov. Quang Ninh (Bai Tu Long Islands) for a single female. However this female differs from the new species in the somewhat smaller size, presence of distinct light triangular spot under the median ocellus, and distinctly shorter tegmina which clearly not reaching apex of shortened hind wings.

Gymnogryllus vietnamensis longidens

Gorochov, **ssp.n.**

Figs 11, 12, 38.

Material. Holotype, ♂, CAMBODIA, ~130 km NNE of town Sihanoukville, Northern part of Elefan Mts, National park Kiri-Rom, h-300–500 m a.s.l., secondary forest, at night during singing near burrow, 27.IX-1.X.2003, A. Gorochov, M. Berezin (ZIN). Paratype, ♂, same data as for holotype, but at light (ZIN).

Description. Male (holotype). Body similar to that of paratype of *G. sylvestris* including shape of tegminal mirror (Fig. 38), but most part of epicranium and of pronotum dark brown (without blackish tinge) and with some lighter spots (yellowish spot under median ocellus, a pair of narrow reddish spots situated transversally on pronotal disc), hind wings reaching abdominal apex and slightly exposed behind tegmina, genitalia with ventral surface of epiphallallic apical part having spine-like processes somewhat longer and median notch between them distinctly narrower (Fig. 11).

Variations. Paratype with tegmina reaching abdominal apex, hind wings significantly exposed behind tegmina, and tegminal mirror with width and length practically equal. However genitalia of paratype almost identical to those of holotype (Fig. 12).

Female unknown.

Length in mm. Body 30–33; body with wings (paratype) 44; pronotum 5.7–5.9; tegmina 21–24; hind femora 18–19.

Comparison. Body structure and coloration of the paratype of *G. v. longidens* are practically indistinguishable from those of *G. v. vietnamensis* (including width of median notch between spine-like processes of apical epiphallallic part), but the new subspecies differs from old one in the thin and long spine-like epiphallallic processes (for comparison see Figs 11, 12 and 13).

Gymnogryllus obscurus Gorochov, **sp.n.**

Figs 3, 14, 39–41.

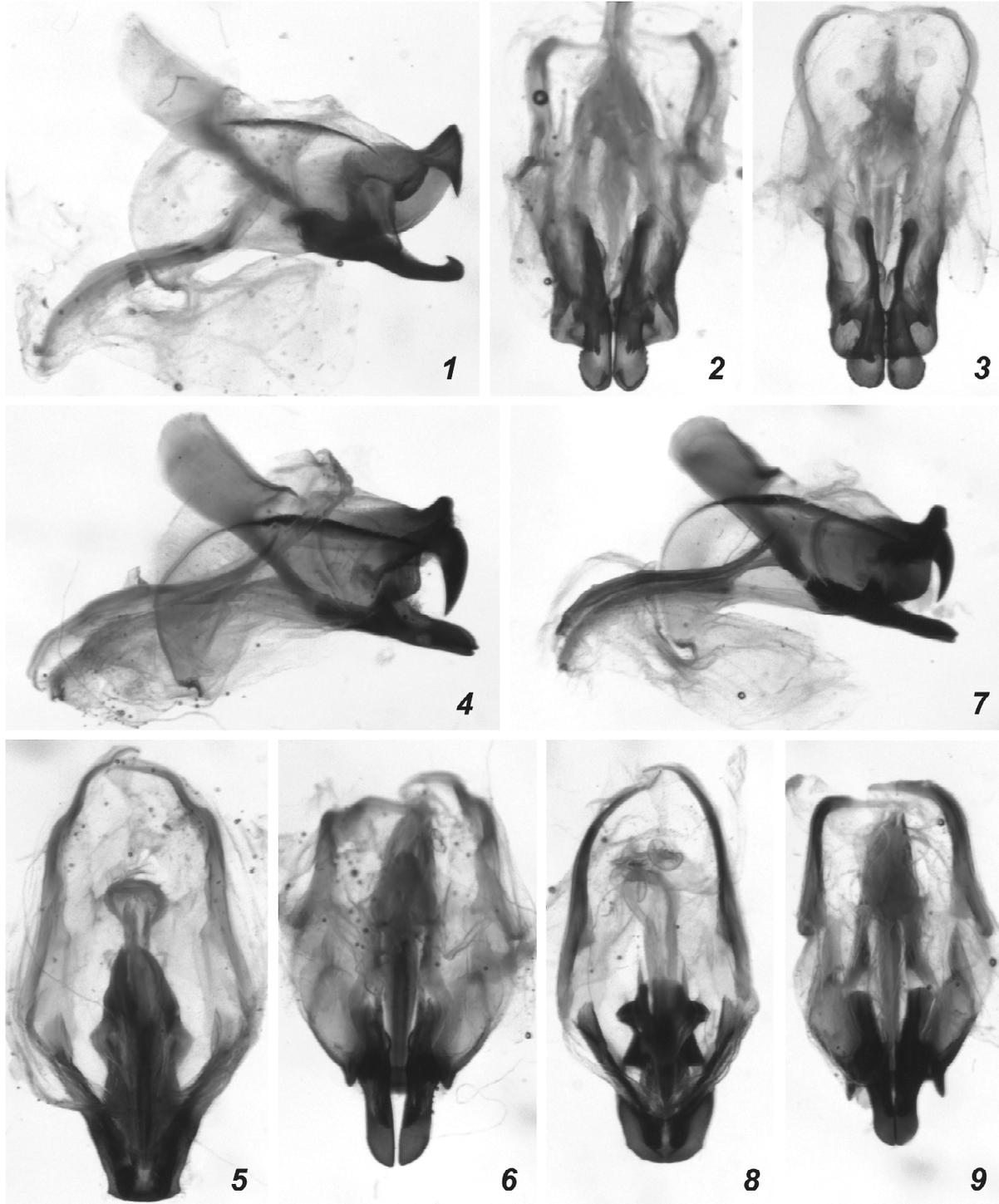
Material. Holotype, ♂, LAOS, prov. Vientiane, National park Phu Khao Khouay, Ban Vangheua, N 18°19.552', E 102°48.692', 850 m, pitfall traps, «disturb pine forest», 30.IX–28.XI.2007, S. Tarasov (ZIN). Paratype, ♀, same data as for holotype (ZIN).

Description. Male (holotype). Body similar to that of holotype of *G. sylvestris*, but with narrower (stripe-like) and darker (hardly lighter than rest of pronotum) spot on each lateral pronotal lobe along ventral edge of this lobe, brown majority of other parts of body excepting dark brown upper part of clypeus, grey lower and median parts of lateral tegminal field, almost blackish darkened areas on legs, slightly longer tegmina (reaching abdominal apex), somewhat shorter apical tegminal area (which clearly shorter than tegminal stridulatory area), less transverse tegminal mirror (Fig. 39), distinctly longer hind wings (their distal part distinctly exposed behind tegmina), notch between spine-like

processes of epiphallallic apical part (if to see from behind) reaching dorsal edge of this part (Fig. 14), and somewhat wider distal part of ectoparameres (if to see from below) (Fig. 3).

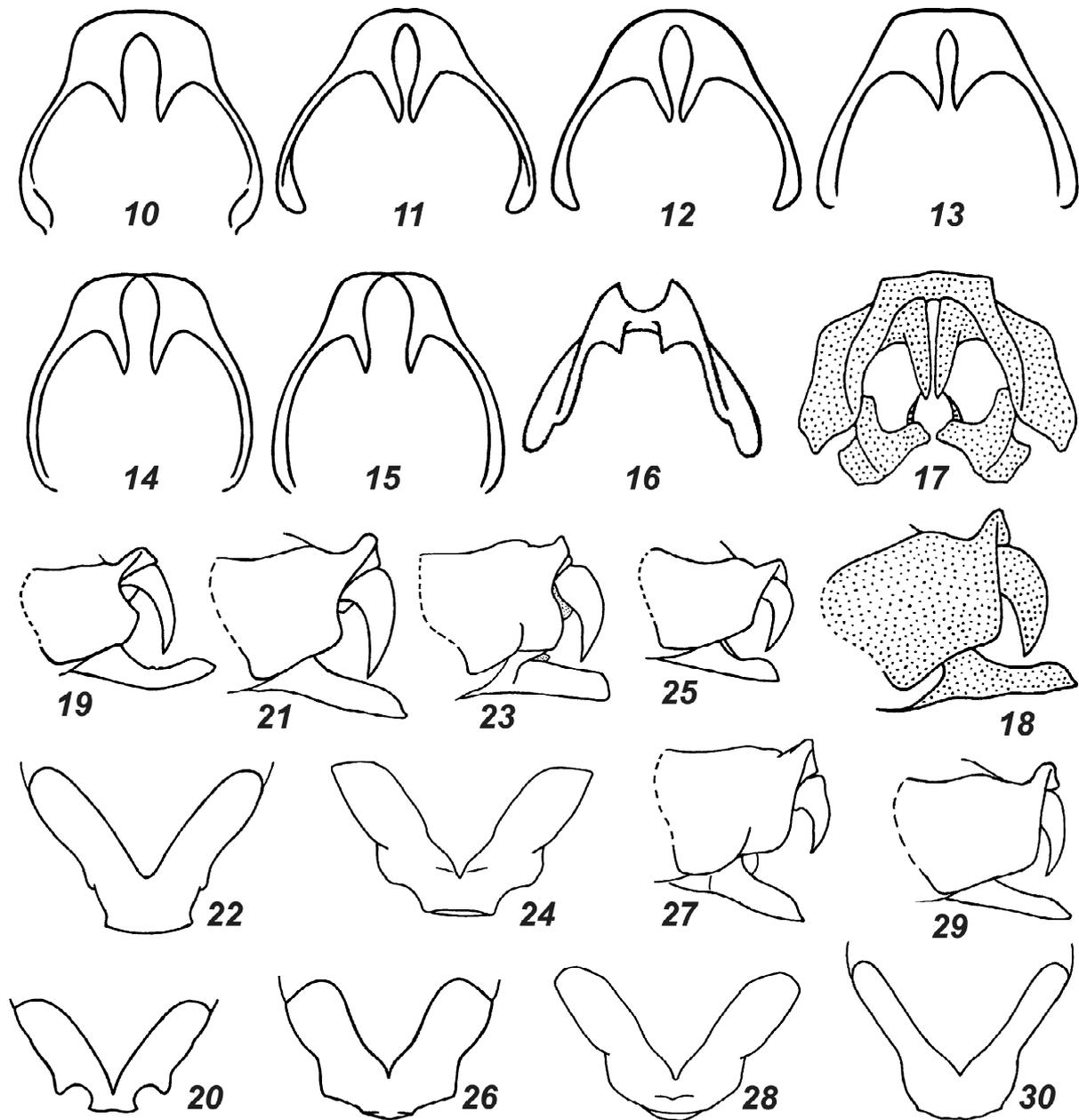
Female. General appearance as in male, but body slightly smaller, tegmina hardly shorter, and dorsal tegminal part

uniformly brown (rather dark) and with numerous almost regular veins and veinlets. Ovipositor similar to that of *G. vietnamensis*, *G. equinus*, and *G. kuznetzovi*, but shorter and with notch, situated at ventral edge of each lower valve between apical part and subapical spinule (right spinule partly missing), shorter than in *G. equinus* and longer than



Figs 1–9. *Gymnogryllus*, male genitalia (holotypes). 1, 2 — *G. sylvestris* sp.n.; 3, *G. obscurus* sp.n.; 4–6 — *G. dinictis* sp.n.; 7–9 — *G. unexpectus trusmadi* ssp.n. Genitalia from lateral side (1, 4, 7), from below and slightly in front (2, 3, 6, 9), and from above (5, 8).

Рис. 1–9. *Gymnogryllus*, гениталии самца (голотипы). 1, 2 — *G. sylvestris* sp.n.; 3 — *G. obscurus* sp.n.; 4–6 — *G. dinictis* sp.n.; 7–9 — *G. unexpectus trusmadi* ssp.n. Гениталии сбоку (1, 4, 7), снизу и слегка спереди (2, 3, 6, 9), сверху (5, 8).



Figs 10–30. *Gymnogryllus*, male genitalia. 10 — *G. sylvestris* sp.n. (holotype); 11, 12 — *G. vietnamensis longidens* ssp.n. (11 — holotype; 12 — paratype); 13 — *G. v. vietnamensis* Gor. (paratype); 14 — *G. obscurus* sp.n.; 15 — *G. equinus* Gor. (holotype); 16 — *G. pravdini pravdini* Gor. (holotype); 17, 18 — *G. unexpectus unexpectus* (Gor. et Kostia); 19, 20 — *G. smilodon* Gor.; 21, 22 — *G. dinictis* sp.n.; 23, 24 — *G. angustus* (Sauss.); 25, 26 — *G. machairodus* Gor.; 27, 28 — *G. malayanus* Des.-Gr.; 29, 30 — *G. u. trusmadi* ssp.n. Distal part of epiphallus from behind (10–16); epiphallus and ectoparameres from behind (17), from side (18, 19, 21, 23, 25, 27, 29), and from above (20, 22, 24, 26, 28, 30). [16–20, 25, 26 — after Gorochov, 1990, 1996, 1999; 23, 24, 27, 28 — after Desutter-Grandcolas, 1996.]

Рис. 10–30. *Gymnogryllus*, гениталии самца. 10 — *G. sylvestris* sp.n. (голотип); 11, 12 — *G. vietnamensis longidens* ssp.n. (11 — голотип; 12 — паратип); 13 — *G. v. vietnamensis* Gor. (паратип); 14 — *G. obscurus* sp.n.; 15 — *G. equinus* Gor. (голотип); 16 — *G. pravdini pravdini* Gor. (голотип); 17, 18 — *G. unexpectus unexpectus* (Gor. et Kostia); 19, 20 — *G. smilodon* Gor.; 21, 22 — *G. dinictis* sp.n.; 23, 24 — *G. angustus* (Sauss.); 25, 26 — *G. machairodus* Gor.; 27, 28 — *G. malayanus* Des.-Gr.; 29, 30 — *G. u. trusmadi* ssp.n. Дистальная часть эпифаллуса сзади (10–16); эпифаллус и эктопарамеры сзади (17), сбоку (18, 19, 21, 23, 25, 27, 29), сверху (20, 22, 24, 26, 28, 30). [16–20, 25, 26 — по Горохову, 1990, 1996, 1999; 23, 24, 27, 28 — по Десуттер-Грандcolas, 1996].

in *G. vietnamensis* and *G. kuznetzovi* (for comparison see Figs 40, 41 and 44, 45, 48).

Length in mm. Body: male 27, female 23; body with wings: male 32, female 29; pronotum: male 5.5, female 4.6; tegmina: male 20, female 17; hind femora: male 16, female 15; ovipositor 3.4.

Comparison. Differences of the new species from *G. sylvestris* are listed above. From *G. vietnamensis*, the new species differs in the clearly wider notch between spine-like processes of epiphallic apical part (if to see from behind), reaching dorsal edge of this part (see Figs 13 and 14), and somewhat wider distal part of ectoparameres (if to see from below); from *G. equinus*, in the shorter and wider apical part of epiphallus (Figs 14, 15) as well as distinctly wider distal part of ectoparameres (if to see from below); from *G. kuznetzovi*, in the longer wings and larger notches between the apical part of ovipositor and subapical spinules on the ventral surface of ovipositor; from *G. odonopetalus* and *G. contractus*, in the not transverse mirror in male tegmina (in *G. obscurus*, its width and length are practically equal).

Gymnogryllus sp.? (near *obscurus*)

Figs 46, 47.

Material. 1♀, VIETNAM, prov. Vinh Phu, environs of vill. Tam Dao, h-900–1000 m a.s.l., partly primary — partly secondary forest, at light, 1–11.VI.1995, A. Gorochov (ZIN); 1♀, same locality, 15.V–5.VII.1997, N. Orlov (ZIN). 2♀♀, LAOS, 16 km NE of city Vientiane, National park Houayang, N 18°5.860', E 102°40.547', h-180 m a.s.l., secondary forest, pitfall and carrion traps, 11.IX–11.X.2007, S. Tarasov (ZIN).

Remarks. These females are similar to *G. obscurus* in general appearance including coloration of body parts and structure of ovipositor, but their body slightly larger than in the paratype of *G. obscurus*, hind wings clearly longer (strongly exposed behind tegmina), and ovipositor hardly longer (for comparison see Figs 40, 41 and 46, 47). These females may belong to a long-winged form of this species or to another related species (or to other subspecies of *G. obscurus*). This problem is in need of a study of males from these localities.

Gymnogryllus dinictis Gorochov, **sp.n.**

Figs 4–6, 21, 22, 42.

Material. Holotype, ♂, INDONESIA, SUMATRA, prov. Lampung, National park Bukit Barisan Selatan, 20–30 km WNW of town Kotaagung, environs of vill. Sukaraja, S 5°30–31', E 104°25–27', 600 m, primary forest, at night during singing near burrow, 14–18.IV.2009, A. Gorochov, M. Berezin, E. Tkatcheva (ZIN).

Description. Male (holotype). General appearance similar to that of paratype of *G. sylvestris*, but most part of epicranium and pronotum dark brown (without blackish tinge), light brown spots on these structures more numerous (transverse spot under median ocellus, triangular spot under previous spot, short transverse stripe under each antennal cavity, small spot near each lateral ocellus, spot along dorsal edge of each eye, most part of genae, lower half of lateral pronotal lobes), antennal scapes light brown, mouthparts brown with light brown maxillae and labium, hind femora dark red with light brown base and almost dark brown apical part, tegmina reaching abdominal apex and with diagonal vein less S-shaped and two oblique veins, tegminal mirror distinctly longer, apical tegminal area somewhat shorter than stridulatory tegminal area (Fig. 42), and hind wings strongly exposed behind tegmina. Genitalia similar to those of *G. smilodon* and *G. angustus* in presence of distinct

notches between epiphallic apical part and epiphallic posteroventral corners, but distinguished from *G. smilodon* by these notches less deep, epiphallic posteroventral corners roundly angular (not obliquely truncate at apex) in profile, ectoparameres and tusk-like processes of ectoparameral dorsal lobes clearly shorter, and from *G. angustus*, by epiphallic apical part distinctly longer in profile and clearly wider, distal half of epiphallus significantly lower (in profile), tusk-like processes of ectoparameral dorsal lobes somewhat shorter (for comparison see Figs 4–6, 21, 22 and 19, 20, 23, 24).

Female unknown.

Length in mm. Body 29; body with wings 37; pronotum 5.7; tegmina 22; hind femora 18.5.

Comparison. The new species is most similar to *G. smilodon* and *G. angustus*, but it differs from them in the genital characters of male listed above. From the other related species, *G. dinictis* is distinguished by the presence of distinct notches between the epiphallic apical part and epiphallic posteroventral corners.

Gymnogryllus unexpectus

Gorochov et Kostia, 1999, **stat.n.**

Figs 17, 18.

Gymnogryllus machairodus unexpectus Gorochov et Kostia, 1999: 273.

Remarks. This species was described as a subspecies of *G. machairodus* from Java [Gorochov, Kostia, 1999]. However it is well distinguished from the true *G. machairodus* described from «Vorderindien» or Bangka I. near Sumatra [Gorochov, 1996] by the clearly higher distal half of epiphallus in profile, distinctly wider apical epiphallic part, and somewhat wider tusk-like process on the dorsal lobe of each ectoparamere (if to see in profile) (for comparison see Figs 17, 18 and 25, 26). From all the other related species, *G. unexpectus* is distinguished by the following characters: from *G. malayanus*, by the clearly wider apical epiphallic part, convex (not concave) upper half of hind edge of tusk-like ectoparameral processes, and concave (not straight) dorsal edge of ectoparameres in profile (see 17, 18 and 27, 28); from *G. angustus*, *G. smilodon*, and *G. dinictis*, by the absence of distinct notches between the epiphallic apical part and epiphallic posteroventral corners (Figs 18 and 19, 21, 23).

Gymnogryllus unexpectus trusmadi

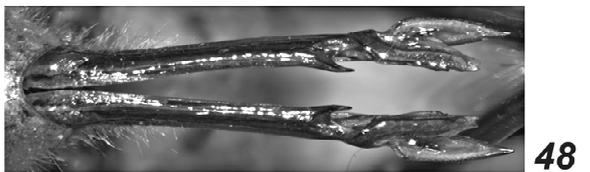
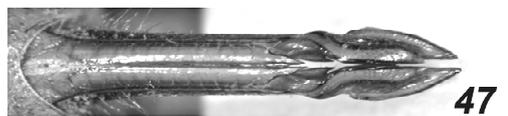
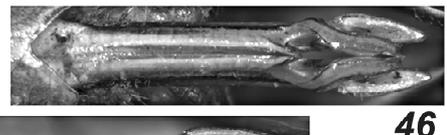
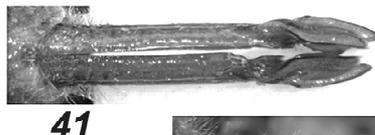
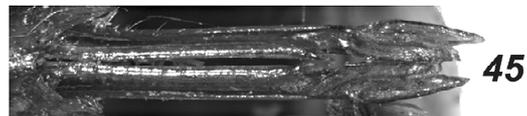
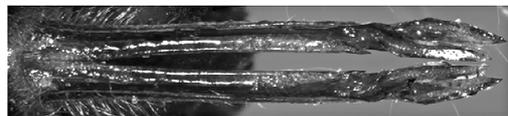
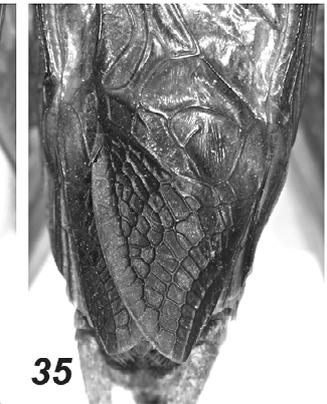
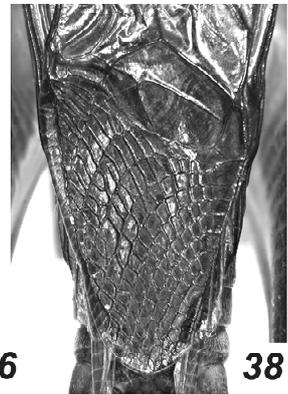
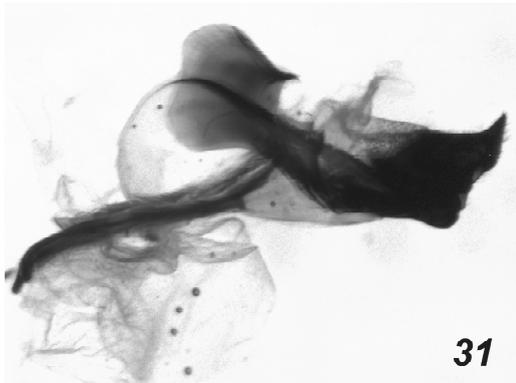
Gorochov, **ssp.n.**

Figs 7–9, 29, 30, 43.

Material. Holotype, ♂, MALAYSIA, BORNEO, state Sabah, Trus Madi Mt, -1000 m, partly primary — partly secondary forest, at light, 13–25.V.2007, A. Gorochov (ZIN). Paratype, ♂, same data as for holotype (ZIN).

Description. Male (holotype). General appearance as in *G. dinictis*, but fore part of lower half of pronotal lateral lobes almost dark brown, hind femora light brown with brown (almost dark brown) distal part and numerous brown oblique stripes on middle part, and tegminal mirror somewhat less long (Fig. 43). Genitalia very similar to those of nominotypical subspecies, however tusk-like process on dorsal lobe of each ectoparamere (if to see in profile) distinctly narrower in distal half (Figs 7–9, 29, 30).

Variations. Paratype with most part of hind femora and of apical tegminal area slightly lighter (light brown with less distinct darkening on middle and hind parts of femora and on tegminal membranes), epiphallus hardly lower in distal half, and ectoparameres insignificantly shorter.



Female unknown.

Length in mm. Body 29–30; body with wings 36–38; pronotum 5.1–5.4; tegmina 22.5–24; hind femora 17.5–18.5.

Comparison. The new subspecies differs from Javanese *G. u. unexpectus* in the distinctly narrower (in profile) tusk-like processes on the dorsal ectoparameral lobes (for comparison see Figs 18 and 29).

Gymnogryllus manokwari Gorochov, sp.n.

Figs 31–35.

Material. Holotype, ♂, INDONESIA, NEW GUINEA, environs of town Manokwari, primary forest on hills not far from sea, at night during singing near burrow, 4-6.XI.2004, A. Gorochov (ZIN). Paratype – male, same data as for holotype (ZIN).

Description. Male (holotype). General appearance more or less similar to that of all species described here, but pronotum distinctly widened near head (fore part of pronotum clearly wider than head, but in all known congeners excepting *G. pravdini*, these body parts almost equal in width), tegmina slightly not reaching abdominal apex, their stridulatory apparatus with four oblique veins (two longest of them almost parallel) and almost straight diagonal vein (Fig. 34), tegminal apical area distinctly shorter than tegminal stridulatory area, tegminal mirror as in Fig. 35, hind wings completely covered with tegmina, and coloration of body following: head brown with light brown ocelli, spot under median ocellus, triangular spot under previous spot, spots between lateral ocelli and antennal cavities, most part of genae, lower part of clypeus, and all parts of maxillae and labium; pronotum dark brown with light brown lower half of lateral lobes; other parts of body light brown with brown stripe on lateral tegminal field along its dorsal edge, areas on basal part of tegminal dorsal field, most part of tegminal apical part, numerous oblique stripes on hind femora, hind tibiae (excepting their spines), and areas on dorsum of abdominal apex. Genitalia similar to those of *G. novaeguinae*, but clearly distinguished by shorter and narrower epiphallalic apical part, smaller median notch at this part, and almost quadrate (not more or less arcuate) heavily sclerotized part of upper ectoparameral lobes (if to see from below) (Figs 31–33).

Variations. Paratype with three oblique veins in tegmina (two longest of them as in holotype).

Female unknown.

Length in mm. Body 30–32; pronotum 6.5–6.7; tegmina 19–21; hind femora 19.5–20.5.

Comparison. The new species is clearly distinguished from *G. novaeguinae* by the characters of male genitalia listed above. From all the other congeners, the new species differs in the absence of very contrast (with blackish and whitish areas) coloration of all body parts, rounded upper ectoparameral lobes lacking any acute processes, or absence of any distinct processes on the ventral surface of epiphallalic apical part.

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Figs 31–48. *Gymnogryllus*, different body structures. 31–35 — *G. manokwari* sp.n. (holotype); 36, 37 — *G. sylvestris* sp.n. (holotype); 38 — *G. vietnamensis longidens* ssp.n. (holotype); 39–41 — *G. obscurus* sp.n.; 42 — *G. dinictis* sp.n.; 43 — *G. unexpectus trusmadi* ssp.n. (holotype); 44 — *G. kuznetzovi* Gor. (holotype); 45 — *G. v. vietnamensis* Gor. (paratype); 46, 47 — *G. ?obscurus* from Vietnam (46) and from Laos (47); 48 — *G. equinus* Gor. (paratype). Male genitalia from side (31); their distal half from above (32) and from below (33); dorsal field of male tegmen without apical area (34, 36) or without proximal half (35, 37–39, 42, 43); ovipositor from below and hardly from side (40) as well as from below (41, 44–48).

Рис. 31–48. *Gymnogryllus*, разные структуры тела. 31–35 — *G. manokwari* sp.n. (голотип); 36, 37 — *G. sylvestris* sp.n. (голотип); 38 — *G. vietnamensis longidens* ssp.n. (голотип); 39–41 — *G. obscurus* sp.n.; 42 — *G. dinictis* sp.n.; 43 — *G. unexpectus trusmadi* ssp.n. (голотип); 44 — *G. kuznetzovi* Гог. (голотип); 45 — *G. v. vietnamensis* Гог. (паратип); 46, 47 — *G. ?obscurus* из Вьетнама (46) и из Лаоса (47); 48 — *G. equinus* Гог. (паратип). Гениталии самца сбоку (31); их дистальная половина сверху (32) и снизу (33); дорсальная часть надкрылья самца без вершинного поля (34, 36) или без проксимальной половины (35, 37–39, 42, 43); яйцеклад снизу и едва сбоку (40), а также снизу (41, 44–48).