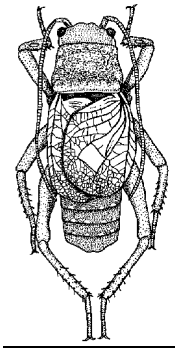


Far Eastern Entomologist

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 243: 1-9 ISSN 1026-051X March 2010

TAXONOMY OF THE KATYDIDS (ORTHOPTERA: TETTIGONIIDAE) FROM EAST ASIA AND ADJACENT ISLANDS. COMMUNICATION 4

A. V. Gorochov

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

Four new species and two new subspecies of the genus *Decma* Gorochov, 1993 are described from Sulawesi and Southern Vietnam: *D.* (*Decma*) *lindu* **sp. n.**, *D.* (*D.*) *sulawesi* **sp. n.**, *D.* (*D.*) *s. wuasa* **subsp. n.**, *D.* (*D.*) *minahassa* **sp. n.**, *D.* (*Neodecma*) *elefani orientale* **subsp. n.**, and *D. abruptum* **sp. n.**

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

А. В. Горохов. Таксономия кузнечиков (Orthoptera: Tettigoniidae) из Восточной Азии и соседних островов. Сообщение 4 // Дальневосточный энтомолог. 2012. N 243. С. 1-9.

Из Сулавеси и Южного Вьетнама описаны четыре новых вида и два новых подвида рода *Decma* Gorochov, 1993: *D.* (*Decma*) *lindu* **sp. n.**, *D.* (*D.*) *sulawesi* **sp. n.**, *D.* (*D.*) *s. wuasa* **subsp. n.**, *D.* (*D.*) *minahassa* **sp. n.**, *D.* (*Neodecma*) *elefani orientale* **subsp. n.** и *D. abruptum* **sp. n.**

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

INTRODUCTION

The present paper is a forth communication in the series of publications on taxonomy of Indo-Malayan and Papuan Tettigoniidae. The previous communications contain mainly descriptions of new taxa from the subfamilies Phaneropterinae, Conocephalinae and Meconematinae (genera *Elimaea* Stål, *Stictophaula* Heb., *Peracca* Griff., *Viriacca* Ingr., *Euanisous* Heb., *Sumatropsis* Gor., *Xiphidiopsis* Redt., *Xizicus* Gor., *Chandozhinskia* Gor.; Gorochov, 2011a, b, c). This (forth) communication presents some results of my work on the genus *Decma* Gor. (Meconematini). The material examined here is deposited in the Zoological Institute, Russian Academy of Sciences, St. Petersburg.

DESCRIPTIONS OF NEW TAXA

Subfamily Meconematinae

Tribe Meconematini

***Decma* (*Decma*) *lindu* Gorochov, sp. n.**

Figs 1–5, 21–23

MATERIAL. Holotype – ♂, **Indonesia**: Sulawesi I., Sulawesi Tengah Prov., National park Lore Lindu, ~15 km SSE of Palu City, environs of Tomado Vill. on Lindu Lake, ~1000 m, on leave of bush in partly primary / partly secondary forest, at night, 13-17.II 2011, A. Gorochov. Paratypes: 3 ♂, 2 ♀, same data.

DESCRIPTION. Male (holotype). General appearance typical of subgenus *Decma*. Coloration light greenish with whitish longitudinal stripe behind each eye and along each lateral edge of pronotal disc, whitish majority of crossveins in tegmina, light brown ring at apex of antennal segments (excepting scape and pedicel), darker (brown) sparse spots on antennal flagellum, and darkish distal part of cercal hooks and of spines on hind tibiae. Upper rostral tubercle of head rather short, almost angular, with flattened dorsal surface having slight median groove. Pronotum with rather long hind lobe (but shorter than rest of pronotum) and distinct humeral notches between it and lateral lobes; pronotal disc with almost straight anterior edge and narrowly rounded posterior edge. Tegmina narrow and long, reaching middle part of hind tibiae; hind wings with rather long apical part exposed behind tegmina. Last abdominal tergite with short and almost truncate hind lobe (Fig. 1); epiproct normal, short and rounded; cerci with long, thin and arcuate medioproximal hook, as well as with much shorter and angular mediodistal hook, and with moderately widened (in profile) apical lobe (Figs 1, 2); apex of latter lobe with small angular projection directed medially (Fig. 3); genital plate and sclerite of genitalia as in Figs 4, 21, 22.

Variations. Medioproximal cercal hook with distinct or almost indistinct small spinules on distal part; mediodistal cercal hook sometimes slightly shorter than in holotype; shape of genital sclerite slightly varied.

Female. Coloration and structure of body very similar to those of male, but last abdominal tergite with almost straight hind edge, cerci small and with more or less cylindrical proximal half and conical distal half, genital plate and ovipositor as in Figs 5, 23.

Length (in mm). Body: ♂ 11–12, ♀ 11.5–12; body with wings: ♂ 21–22, ♀ 24–25; pronotum: ♂ 3.8-4, ♀ 3.5–3.7; tegmina: ♂ 15.8–17, ♀ 18.5-19; hind femora: ♂ 10.5–11, ♀ 11.8–12.3; ♂ genital sclerite 1.8–2; ovipositor 7.4–7.8.

COMPARISON. The new species differs from all the other congeners with known males in the presence of mediodistal angular hook on the middle part of male cerci and absence of large paired lobes at hind edge of male last tergite. From *D. predtetshenskyi* Gor. and *D. orlovi* Gor. with unknown males, the new species differs in the hind median notch of female genital plate distinctly wider and less deep (from *D. predtetshenskyi*) or subapical part of this plate narrower than its middle part (from *D. orlovi* having this subapical part strongly widened, wider than other parts of genital plate).

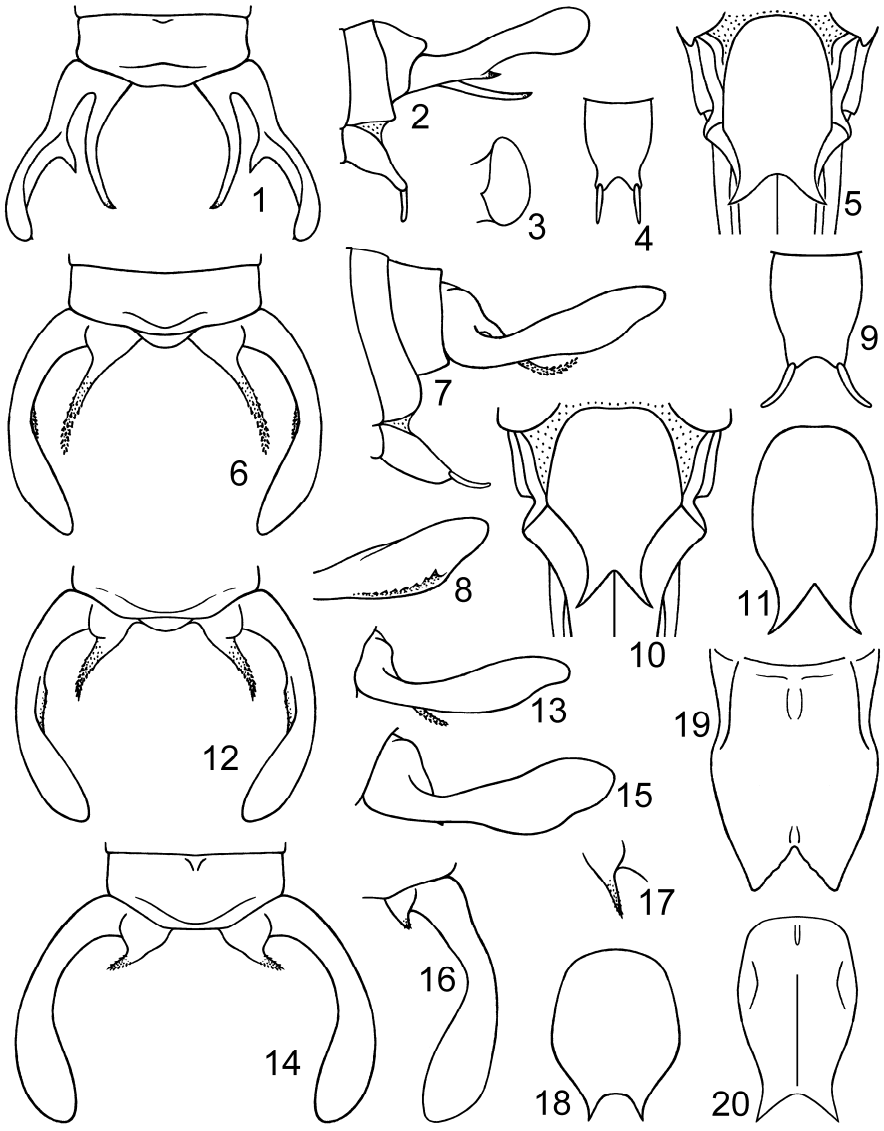
***Decma* (*Decma*) *sulawesi* Gorochov, sp. n.**
Figs 6–11, 24, 25

Holotype – ♂, **Indonesia**: Sulawesi I., Sulawesi Utara Prov., ~40 km NE of Manado City, National park Tangkoko on eastern coast of Minahassa Peninsula, environs of Tangkoko Lodge, on leave of bush in partly primary / partly secondary forest, at night, 3-6.II 2011, A. Gorochov. Paratypes: 2 ♂, 4 ♀, same data; 1 ♂, 3 ♀, same province, National park Bogani Nani Wartabone near Toraut Vill. (not far from Doloduo Town between middle of Minahassa Peninsula and its eastern end), environs of Wallace Base Camp, on leaves of bushes around anthropogenic glade in primary forest, at night, 17-25.I 2011, A. Gorochov.

DESCRIPTION. Male (holotype). Coloration and structure of body similar to those of *D. lindu*, but distinguished by following characters: pronotum with almost indistinct whitish stripes; spot at apex of each antennal segment (excepting scape and pedicel), ring at base of third antennal segment, and most part of medioproximal hook of cerci somewhat darker (brown); dorsum of hind part of last abdominal tergite more or less widely rounded (Fig. 6); each cercus with only one long (but shorter than in *D. lindu*) medioproximal hook having inflate base and numerous and distinct small spinules on most part of its rest (Figs 6, 7); lateral lobe of cerci moderately widened in middle part and having one row of brown denticles on its ventromedial edge (Figs 7, 8); genital plate with slightly less deep hind median notch (Fig. 9); genital sclerite (Figs 24, 25) slightly shorter.

Variations. Some males with almost light brown narrow stripe on each tegmen along anal edge; medioproximal hook of cerci from moderately (Fig. 7) to weakly arcuate in profile; last abdominal tergite and genital sclerite slightly varied in shape.

Female. Coloration and structure of body very similar to those of male, however abdominal apex as in female of *D. lindu*, but with hind median notch of genital plate almost angular (not rounded), with distal part of this plate sometimes somewhat narrower (Figs 10, 11), and with ovipositor weakly shorter (approximately as in Fig. 28).



Figs 1–20. *Decma* Gor. 1-5 – *D. lindu* sp. n.; 6-11 – *D. sulawesi sulawesi* subsp. n.; 12, 13 – *D. s. wuasa* subsp. n.; 14-18 – *D. minahassa* sp. n.; 19 – *D. elefani orientale* subsp. n.; 20 – *D. abruptum* sp. n. Male abdominal apex without genital plate from above (1, 6, 12, 14), and this apex with genital plate from side (2, 7); apical part of right male cercus from behind (3); male genital plate from below (4, 9); female abdominal apex without most part of ovipositor from below (5, 10); inner surface of lateral lobe of right male cercus (8); female genital plate from below (11, 18–20); left male cercus from side (13, 15); right male cercus (16) and its medioproximal hook (17) from above.

Length (in mm). Body: ♂ 10–12, ♀ 9–13; body with wings: ♂ 21–23, ♀ 21–24; pronotum: ♂ 3.7–4.1, ♀ 3–3.5; tegmina: ♂ 16–17.5, ♀ 16–18; hind femora: ♂ 12–13, ♀ 11–13; ♂ genital sclerite 1.6–1.7; ovipositor 6.2–7.

COMPARISON. The new species is similar to *D. inversum* (Karny), *D. bolivari* (Karny), *D. stshelkanovtzevi* Gor., *D. thai* Gor., *D. miramae* Gor., *D. fissum* (Xia et Liu), and *D. triste* Gor., Liu et Kang in the structure of male last tergite and male cerci, but distinguished by the presence of denticles on the ventromedial edge of lateral lobe of male cerci, narrower (from *D. inversum*) or wider (from *D. bolivari*, *D. stshelkanovtzevi* and *D. thai*) lateral lobe of male cerci in profile, and distinctly less deep median notch on the apex of female genital plate (from *D. miramae*, *D. fissum* and *D. triste*). From *D. predtechenskiji* and *D. orlovi* with unknown males, the new species differs in the same character of female genital plate (from *D. predtetshenskyi*) or subapical part of this plate narrower than its middle part (from *D. orlovi*); from *D. mesembrinum* (Kevan), in the absence of large paired lobes at hind edge of male last tergite; and from *D. lindu*, in the characters listed in the new species description.

***Decma* (*Decma*) *sulawesi wuasa* Gorochov, subsp. n.**
Figs 12, 13, 26–28

MATERIAL. Holotype – ♂, **Indonesia**: Sulawesi I., Sulawesi Tengah Prov., National park Lore Lindu, ~75 km SE of Palu City, environs of Wuasa Vill. near eastern edge of park, ~1000 m, on leave of bush in partly primary / partly secondary forest, at night, 7-12.II 2011, A. Gorochov. Paratypes: 2 ♀, same data.

DESCRIPTION. Male. Coloration and structure of body as in *D. s. sulawesi* stat. n., however antennae completely light (without any darkened rings or spots), last abdominal tergite with hind lobe similar to that of *D. lindu* (but somewhat wider; Fig. 12), medioproximal hook of cerci less arcuate than in holotype of nominotypical subspecies and weakly (but distinct) shorter (Figs 12, 13), and genital sclerite (Figs 26, 27) slightly shorter.

Female. Coloration and structure of body very similar to those of male, but abdominal apex as in *D. s. sulawesi* or with hind median notch of genital plate less angular (more or less similar to that of *D. lindu*).

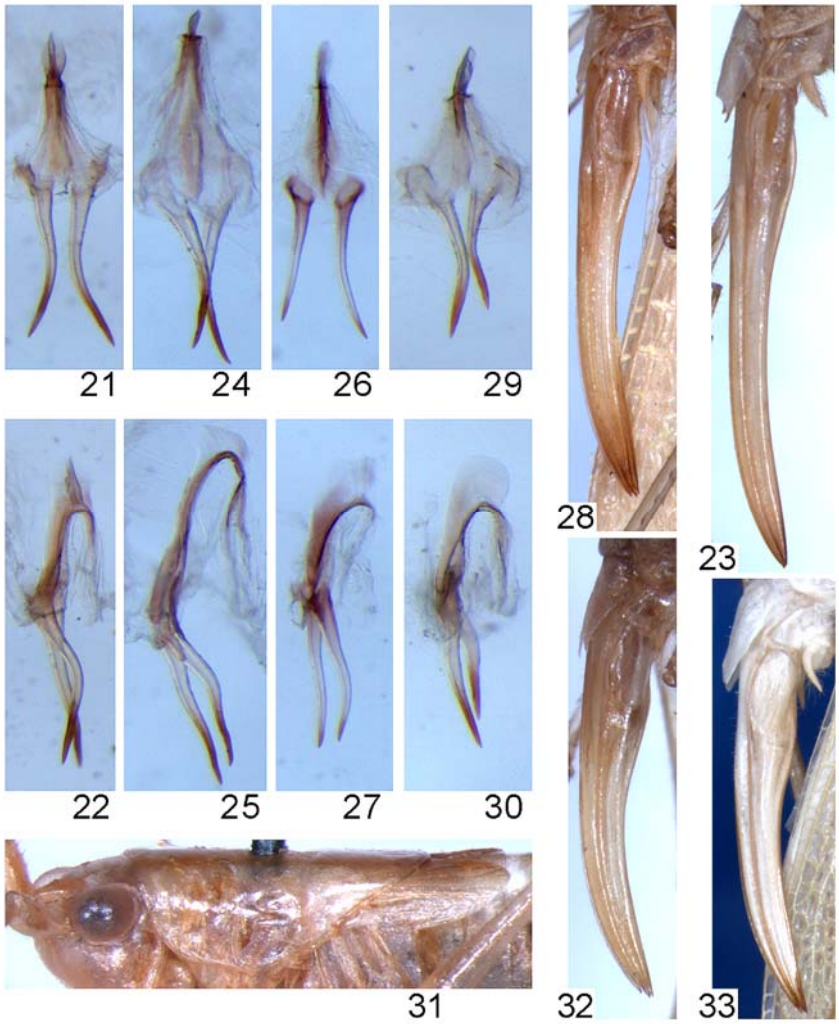
Length (in mm). Body: ♂ 11.3, ♀ 9–10.5; body with wings: ♂ 21.5, ♀ 22–23; pronotum: ♂ 3.7, ♀ 3.4–3.5; tegmina: ♂ 16.5, ♀ 17.5–18; hind femora: ♂ 10.2, ♀ 10.8–11; ♂ genital sclerite 1.5; ovipositor 6.6–6.8.

COMPARISON. The new subspecies differs from nominotypical one in the characters listed above. I cannot exclude that it may be a separate species distinguished from all the other congeners by the same characters as *D. s. sulawesi*.

***Decma* (*Decma*) *minahassa* Gorochov, sp. n.**
Figs 14–18, 29, 30

MATERIAL. Holotype – ♂, **Indonesia**: Sulawesi I., Sulawesi Utara Prov., National park Bogani Nani Wartabone near Toraut Vill. (not far from Doloduo Town

between middle of Minahassa Peninsula and its eastern end), environs of Wallace Base Camp, on leaves of bushes around anthropogenic glade in primary forest, at night, 17-25.I.2011, A. Gorochov. Paratypes: 14 ♂, 10 ♀, same data; 3 ♂, 2 ♀, same province, ~40 km NE of Manado City, National park Tangkoko on eastern coast of Minahassa Peninsula, environs of Tangkoko Lodge, on leave of bush in partly primary / partly secondary forest, at night, 3-6.II 2011, A. Gorochov.



Figs 21–33. *Decma* Gor. 21-23 – *D. lindu* sp. n.; 24, 25 – *D. sulawesi sulawesi* subsp. n.; 26-28 – *D. s. wuasa* subsp. n.; 29, 30 – *D. minahassa* sp. n.; 31, 32 – *D. abruptum* sp. n.; 33 – *D. elefani orientale* subsp. n. Male genital sclerite from above (21, 24, 26, 29) and from side (22, 25, 27, 30); ovipositor from side (23, 28, 32, 33); pronotum with tegmina from side (31).

DESCRIPTION. Male (holotype). Coloration and structure of body similar to those of *D. lindu*, but distinguished by following characters: stripes on head and pronotum as well as part of tegminal crossveins yellowish (not whitish); cerci similar to those of *D. sulawesi*, however their distal half distinctly wider (higher) in profile, and their medioproximal hook short and practically not arcuate (Figs 14, 15); genital plate with somewhat wider proximal half; sclerite of genitalia (Figs 29, 30) slightly smaller than in *D. s. wuasa*.

Variations. Medioproximal hook of cerci distinctly varied in length (Figs 16, 17), but shorter than in both subspecies of *D. sulawesi*; genital plate somewhat varied in shape (from that similar to *D. lindu* or *D. sulawesi* to that with somewhat wider proximal half).

Female. Coloration and structure of body very similar to those of male, but abdominal apex as in females of *D. lindu* and *D. sulawesi* excepting apical part of genital plate which usually shorter, narrower, and with hind median notch rounded and less deep (Fig. 18); however some specimens with genital plate more or less similar to that of *D. lindu* (Fig. 5) and *D. sulawesi* (Fig. 11); ovipositor very similar to that of *D. sulawesi*.

Length (in mm). Body: ♂ 9–13, ♀ 9–12; body with wings: ♂ 19–23, ♀ 21–23; pronotum: ♂ 3.3–3.8, ♀ 3.1–3.5; tegmina: ♂ 14–17, ♀ 15–17; hind femora: ♂ 9–11, ♀ 10–11.5; ♂ genital sclerite 1.2–1.4; ovipositor 6.5–7.

COMPARISON. The new species differs from *D. lindu* in the above-mentioned characters of male cerci; from *D. sulawesi*, in the antennae having a darkish ring at the apex of each segment of flagellum and lacking any dark or darkish ring at the base of third antennal segment, wider (higher) distal half of male cerci, and shorter medioproximal hook of these cerci; from *D. inversum*, *D. thai*, *D. triste*, *D. fissum*, *D. miramae*, *D. stshelkanovtsevi*, in the distinctly shorter medioproximal hook of male cerci; from *D. bolivari*, in the much wider distal half of male cerci; from *D. mesembrinum*, in the absence of large paired lobes at the hind edge of male last tergite; and from *D. orlovi* and *D. predtechenskiji* with unknown males, in the female genital plate having the distinctly narrower subapical part (from *D. orlovi*) or clearly shorter hind median notch (from the latter species).

***Decma* (*Neodecma*) *elefani orientale* Gorochov, subsp. n.**
Figs 19, 33

MATERIAL. Holotype – ♀, **Vietnam**: southern part, Dong Nai Prov., National park Cat Tien, 3-14.XII 2010, L. Anisyutkin, A. Anichkin. Paratype – ♂, same province, Vinh Cuu Distr., Vinh Cuu Nature Reserve (= Ma Da Forest), TW Cuc Forest Station, 11°22’51’’ N, 107°03’44’’ E, 75 m, 21-29.XI 2010, L. Anisyutkin, A. Anichkin, A. Abramov, S. Kruskop.

DESCRIPTION. Female. General appearance typical of subgenus *Neodecma* Gor. (Gorochov, 2004). Coloration yellowish white with some structures and marks (antennae excepting ventral half of scape, four longitudinal lines on epicranial dorsum,

a pair of longitudinal stripes on pronotal disc, borders of lateral lobes excepting dorsal one, and weakly distinct area at middle of these lobes) more yellowish, with light brown very small spots on ventral surface of antennal flagellum and narrow stripe along most part of anal edge of tegmina, and with partly brown spines and spurs of legs, ventrodistal part of second segment of tarsi, and many membranes between R and M in distal half of tegmina. Pronotum similar in shape to that of subgenus *Decma* and of female of *D. e. elefani* **stat. n**.: hind lobe not very long, humeral notches distinct and sloping. Tegmina long, extending somewhat beyond apex of hind femora; hind wings significantly exposed behind tegmina. Genital plate with rather deep and almost angular hind median notch (Fig. 19); ovipositor as in Fig. 33.

Male. Coloration and structure of body similar to those of female, but hind lobe of pronotum distinctly longer (practically as in *D. e. elefani*) and abdominal apex almost as in nominotypical subspecies, but apices of sclerotized spines in genitalia situated somewhat more widely than in this subspecies (see Gorochov, 2004: Fig. 4).

Length (in mm). Body: ♂ 9, ♀ 10.5; body with wings: ♂ 16, ♀ 18; pronotum: ♂ 3.8, ♀ 3.3; tegmina: ♂ 12.5, ♀ 13.5; hind femora: ♂ 9.5, ♀ 10.5; ovipositor 5.5.

COMPARISON. The new subspecies differs from *D. e. elefani* mainly in the distinctly deeper and angular notch at the apex of female genital plate, but there are also small differences in the coloration (tegmina with the darker spots) and shape of male genital sclerite (its spines with the apices more widely situated). From *D. bispinosa* Liu et Zhou described by Liu & Zhou (2007) in the subgenus *Paradecma* Liu et Zhou and having the male cerci similar to those of *Neodecma* Gor., *D. e. orientale* differs in the more bifurcate apex of these cerci and somewhat shorter male genital plate.

***Decma abruptum* Gorochov, sp. n.**
Figs 20, 31, 32

MATERIAL. Holotype – ♀, **Indonesia**: Sulawesi I., Sulawesi Tengah Prov., National park Lore Lindu, ~75 km SE of Palu City, environs of Wuasa Vill. near eastern edge of park, ~1000 m, on leave of bush in partly primary / partly secondary forest, at night, 7-12.II 2011, A. Gorochov.

DESCRIPTION. Female. Coloration yellowish with slight brownish tinge, a pair of longitudinal light brown stripes on pronotal disc, one such stripe on exposed part of each tegmen along its medial edge, brown small and very sparse spots on antennal flagellum, and brown distal half of spines of hind tibiae. Structure of body similar to that of female of *D. elefani*, however pronotum without distinct humeral notches between hind lobe and lateral lobes (Fig. 31), tegmina strongly shortened (reaching only apex of second abdominal tergite) and with more or less narrowly rounded apical part, tegminal venation reduced (only two longitudinal veins near median axis of tegmen preserved), hind wings invisible from above and from side, cerci slightly shorter, ovipositor in profile insignificantly more curved (Fig. 32), and genital plate as in Fig. 20.

Male unknown.

Length (in mm). Body 10.5; pronotum 3.4; tegmina 2; hind femora 9.7; ovipositor 5.7.

COMPARISON. The new species is similar to the true representatives of *Decma* in the coloration and structure of body including characteristic shape of female genital plate. It is also similar to *D. elefani* in the shape of ovipositor, but distinguishes from it by the pronotum lacking humeral notches, wings strongly reduced, and female genital plate with the almost spine-like posterolateral lobes. From all the other congeners, *D. abruptum* differs in the same characters of pronotum and wings, and additionally from sympatric *D. sulawesi wuasa*, in the shorter and clearly more curved ovipositor.

ACKNOWLEDGEMENTS

I thank my colleagues collecting some interesting specimens for this study. The work is supported by the Russian Foundation for Basic Research (project No 10-04-00682), Presidium of the Russian Academy of Sciences (Program "Biosphere origin and evolution of geo-biological systems"), and the Ministry of Education and Science of the Russian Federation.

REFERENCES

Gorochov A. V. 2004. A new subgenus and two new species of *Decma* (Orthoptera: Tettigoniidae: Meconematinae). *Zoosystematica Rossica*, 13(1): 28.

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.

Liu X.-W., Zhou M. 2007. A taxonomic study on the genus *Decma* Gorochov from China (Orthoptera: Tettigonioidea: Meconematidae). *Acta Entomologica Sinica*, 50(6): 610–615.

SHORT COMMUNICATION

V. M. Loktionov, A. S. Lelej. TAXONOMIC NOTES ON THREE SPECIES OF SPIDER WASPS (HYMENOPTERA, POMPILIDAE) FROM RUSSIAN FAR EAST. – Far Eastern Entomologist. 2012. N 243: 10-14.

Summary. Three species, *Anoplius* (*Anoplius*) *aberrans* Gussakovskij, 1932, **stat. resurr.**, *Priocnemis* (*Priocnemis*) *shidai* Ishikawa, 1962, **stat. resurr.**, and *P.* (*P.*) *kunashirensis* Lelej, 1988, **stat. resurr.**, are considered as valid species.

Key words: Spider wasps, taxonomy, Russian Far East.

В. М. Локтионов, А. С. Лелей. Таксономические заметки о трех видах дорожных ос (Hymenoptera, Pompilidae) с Дальнего Востока России // Дальневосточный энтомолог. 2012. N 243. С. 10-14.

Резюме. Восстановлен статус трех видов: *Anoplius* (*Anoplius*) *aberrans* Gussakovskij, 1932, **stat. resurr.**, *Priocnemis* (*Priocnemis*) *shidai* Ishikawa, 1962, **stat. resurr.** и *P.* (*P.*) *kunashirensis* Lelej, 1988, **stat. resurr**.

RESULTS

Anoplius (*Anoplius*) *aberrans* Gussakovskij, 1932, stat. resurr.

Paranoplius separatus Haupt, 1929: 118 (key), 145 (description), ♀ [holotype, Transkaspigebiet, Sandsteppen am unteren Amu Darja, coll. Wolowodo S.// Type//*Ps*. (*Paranoplius*) *separatus* Hpt., det. Haupt, 1928, ♀ // Zool. Mus. Berlin // R. Wahis dt. 1997 *Anoplius separatus* Haupt, 1929, ♀ // Holotypus, Lelej design., 2011, examined]. Junior secondary homonym in *Anoplius*, nec *Pompilus separatus* Tashenberg, 1869 [*Anoplius*].

Anoplius aberrans Gussakovskij, 1932: 45, ♀ nec ♂ [lectotype, ♀ "Sedanka, Vladivostok, 22.VI 1930, R Malaise", designated by Lelej, Yamane, 1994: 233, deposited in Zoological Institute, St. Petersburg, examined]. Junior subjective synonym of *Paranoplius separatus* Haupt, 1929 according to Wahis, 2001: 158.

Anoplius (*Anoplius*) *luzonicus* Tsuneki, 1988: 38, ♀♂ [holotype, ♀ "Bontoc, 850 m, Mountain Prov., Luzon, 29–30.XII 1979, T. Murota"]. Junior subjective synonym of *Anoplius aberrans* Gussakovskij, 1932 according to Lelej, Yamane, 1994: 233.

Anoplius (*Anoplius*) *aberrans*: Lelej, Yamane, 1994: 233; Lelej et *al.*, 1994: 143; Lelej, 1995: 255; 2000: 624; 2001: 23.

Anoplius (*Anoplius*) *separatus*: Lelej, 2005: 132, ♀♂.

MATERIAL. **Russia**: 77♀, 93♂ from Primorskii krai (Pyazanovka, "Kedrovaya Pad" Natural Reserve, Nezhino, Vladivostok, Novonezhino, Anisimovka, Tikhookeanskii, Lazovsky Natural Reserve, Brovnichi, Nikolaevka, Ussuriiskii Natural Reserve, Novokachalinsk, Anuchino, Yakovlevka, Novomihailovka, Lenino, upper part of Sokolovka River, Shumnyi, Melnichnoe, Gogolevka, Dersu, Plastun); 9♀, 5♂ from Amurskaya oblast (Blagoveschensk, Kundur, Arkhara, Natalino, Chernigovka); 44♀, 44♂ from Sakhalin (Shebunino, Novikovo, Novoaleksandrovsk, Chistovodnoe, Bykov, Dolinsk, Boshnyakovo, 20 km W of Smirnyh, 40 km E of Zonalnoe, Tymovskoe); 19♀, 17♂ from Kunashir Is. (9 km S of Yuzhno-Kurilsk, Tretyakovo, Alehino, Goryachee Lake, Dubovoe).

DISTRIBUTION. Russia (Amurskaya oblast, Primorskii krai, Sakhalin, Kuril Islands, Kamchatka, Magadanskaya oblast, Irkutskaya oblast), Japan (Hokkaido, Honshu), Republic of Korea, China (Guangdong, Taiwan), Philippine (Luzon), Indonesia (Celebes), Uzbekistan (Lelej, 2005).

REMARKS. In 2011 second author studied the holotype of *Paranoplius separatus* Haupt, 1929 (see above) and holotype of *Pompilus separatus* Taschenberg, 1869 (Nov. Frib[urg], Mendoza [Argentina] // Holotypus // *Anoplius dubiosus* Hpt., ♀ Haupt det. 1941 // *separatus* Taschenberg, Haupt det. 193[?] [Martin-Luter-Universität, Halle-Wittenberg, Germany]. *Pompilus separatus* Taschenberg currently belong to the genus *Anoplius*. Taschenberg's name is senior secondary homonym; for replacement of Haupt's name we used junior synonym, *Anoplius aberrans* Gussakovskij, 1932.

***Priocnemis* (*Priocnemis*) *kunashirensis* Lelej, 1988, stat. resurr.**
Figs 4, 8

Priocnemis (*Priocnemis*) *kunashirensis* Lelej, 1988: 76, 86, ♀ [holotype, ♀ "Kunasir Is., Alekhino, 15.VIII 1980 (Lelej)", deposited in Zoological Institute, St. Petersburg, examined]. Junior subjective synonym of *Salius* (*Priocnemis*) *fenestrata* Gussakovskij, 1926 according to Lelej, 2000: 620.

Priocnemis (*Priocnemis*) *fenestrata*: Lelej, 2000: 620, 621, ♀♂ (part., Kunashir, Hokkaido, Honshu); Lelej, 2001: 23 (part., Kunashir).

MATERIAL. **Russia**: Paratypes. Kunashir Il.: Dubovoe, 7.VIII 1980, 20–21.VII 2011, 7♀ (Lelej); Alekhino, 15.VIII 1980, 1♀ (Lelej). Additional material. Kunashir Il.: Tretyakovo, 27, 28.VII 2011, 2♂ (Loktionov, Proshchalykin); Goryachee Lake, 23–25.VII 2011, 5♀, 26♂ (Loktionov, Proshchalykin); Dubovoe, 30, 31.VII 1989, 20–21.VII 2011, 9♀, 77♂ (Lelej, Nemkov, Sidorenko, Loktionov, Proshchalykin).

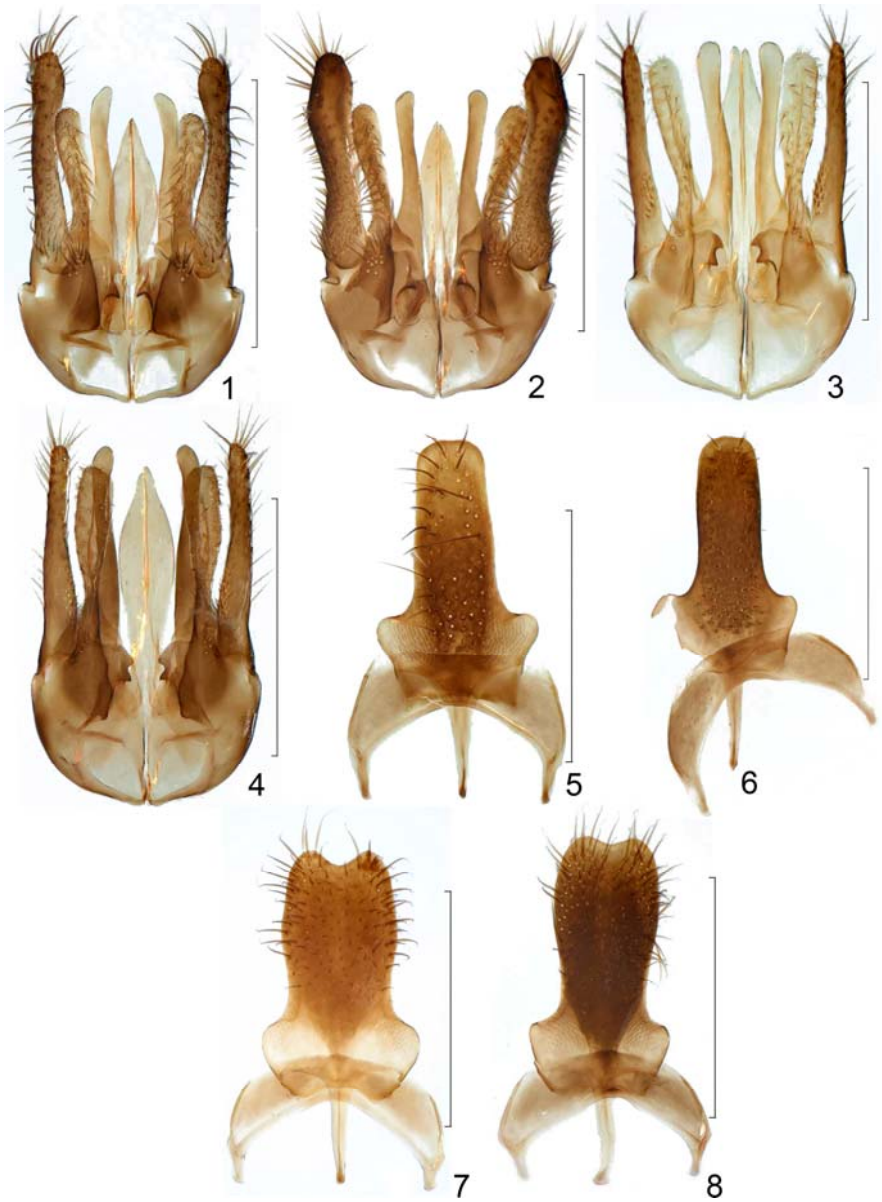
DISTRIBUTION. Russia (Kuril Islands: Kunashir), Japan (Hokkaido, Honshu).

REMARKS. *Priocnemis* (*Priocnemis*) *kunashirensis* Lelej, 1988 was synonymized under *Salius* (*Priocnemis*) *fenestrata* Gussakovskij, 1926 by Lelej, 2000 based of similar external shape of hypopygium in males and sculpture of propodeum in females. After detail study of extruded male genitalia and hypopygium of males collected on Kunashir islands, and ones collected on mainland, we concluded that *P.* (*P.*) *kunashirensis* is a valid species and its status is resurrected. The male of *P. kunashirensis* differs from one of *P. fenestrata* by having another genitalia and hypopygium (Figs 4, 8 *vs.* 3, 7); male and female of *P. kunashirensis* have almost black metasoma (basal metasomal segments of reddish in *P. fenestrata*). If *P. kunashirensis* inhabits the islands, *P. fenestrata* is distributed on the mainland.

***Priocnemis* (*Priocnemis*) *shidai* Ishikawa, 1962, stat. resurr.**
Figs 2, 6

Priocnemis (*Priocnemis*) *shidai* Ishikawa, 1962: 356, ♀♂ [holotype, ♂ "Karuizawa, Nagano Pref., 10.VIII 1955 (R. Ishikawa)", deposited in Ishikawa collection, Tokyo]. Junior subjective synonym of *Priocnemis* (*Priocnemis*) *pseudopogonia* Gussakovskij, 1930 according to Lelej, 2000: 620.

Priocnemis (*Priocnemis*) *pseudopogonia*: Lelej, 1988: 76, 79, 85 (part., Kunashir); 1995: 221, 224 (part., Kunashir); 2000: 620, 621 (part., Kunashir, Honshu); 2001: 23 (part., Kunashir); Lelej, Yamane, 1992: 99, 100 (part., Kunashir); Lelej et *al*., 1994: 136 (part., Kunashir).



Figs 1–8. Male genitalia and hypopygium. 1, 5) *Priocnemis pseudopogonia*; 2, 6) *P. shidai*; 3, 7) *P. fenestrata*; 4, 8) *P. kunashirensis*. 1–4) genitalia; 5–8) hypopygium. Scale bar 0.5 mm.

MATERIAL. Kunashir: Yuzhno-Kurilsk, Lesnaya River, 19.VIII 1989, 1♂ (Nemkov); Mendeleevo, 12.IX 1975, 1♀ (Korotyaev); Tretyakovo, 20, 21.VIII 1980, 3♀, 2♂ (Lelej); Lagunnoe Lake, 26.VII 1975, 1♀ (Berezantzev).

DISTRIBUTION. Russia (Kuril Islands: Kunashir), Japan (Honshu).

REMARKS. *Priocnemis shidai* was synonymized under *P. pseudopogonia* Gussakovskij, 1930 (Lelej, 2000) based on the external morphological characters of males. The male of *Priocnemis shidai* differs from one of *P. pseudopogonia* by having another genitalia and hypopygium (Figs 1, 5 *vs.* 2, 6) and we consider both of them as separate species. The status of *Priocnemis shidai* is resurrected here. When *Priocnemis shidai* inhabits islands, *P. pseudopogonia* is distributed in the mainland.

ACKNOWLEDGEMENTS

We thank F. Koch (Museum für Naturkunder, Berlin, Germany) and K. Schneider (Martin-Luther-Universität, Halle-Wittenberg, Halle, Germany) for the help in the study of type material. We thank all collectors of material. The work was supported by the Russian Found of Basic Research (grants No 11–04–00624, 11–04–90761) and the Far Eastern Branch of the Russian Academy of Sciences (grant No 12–III–A–06–063).

REFERENCES

Gussakovskij, V. 1932. Verzeichnis der von Herrn Dr. R. Malaise im Ussuri und Kamtschatka gesammelten aculeaten Hymenopteren. *Arkiv för Zoologi*, 24A(10): 1–66.

Ishikawa, R. 1962. Notes on some genera and species of the tribe Pepsini of Japan (Hymenoptera, Pompilidae). *Acta Hymenopterologica*, 1(4): 327–360.

Lelej, A.S., Saigusa, T., Lee, Ch.E.1994. Spider wasps (Hymenoptera, Pompilidae) of Korea. *Russian Entomological Journal*, 3(1–2): 135–148.

Lelej, A.S. 1988. Spider wasps of the genus *Priocnemis* Schiødte (Hymenoptera, Pompilidae) of the Soviet Far East. *Horae Societatis Entomologicae Unionis Soveticae,* 70: 74–87. (In Russian).

Lelej, A.S. 1995. 64. Fam. Pompilidae – Spider wasps. *In*: Lelej A.S., Kupianskaya A.N., Kurzenko N.V. & Nemkov P.G. (Eds). *Key to the insects of the Russian Far East. Vol. 4. Pt 1.* Sankt Petersburg: Nauka. P. 211–264. (In Russian).

Lelej, A.S. 2000. Fam. Pompilidae – Spider wasps. Addition. *In*: Lelej A.S. (Eds). *Key to the insects of the Russian Far East. Vol. 4. Pt 4.* Vladivostok: Dalnauka. P. 615–624. (In Russian).

Lelej, A.S. 2001. Spider wasps (Hymenoptera, Pompilidae) of the Kuril Islands. *Abstracts of the International Symposium on Kuril Island Biodiversity, Sapporo, May 18-22*. P. 23–24.

Lelej, A.S. 2005. Spider wasps (Hymenoptera, Pompilidae) of Sakhalin Island. *In*: Storozhenko, S.Y. (Ed.), *Flora and Fauna of Sakhalin Island. Part 2.* Vladivostok: Dalnauka. P. 122–140. (In Russian).

Lelej, A.S., Yamane, Sk. 1992. Spider wasps (Hymenoptera, Pompilidae) from Kyushu and the Ryukyus, southern Japan. *Report of the Faculty of Science, Kagoshima University* (*Earth Sciences and Biology*), 25: 95–110.

Lelej, A.S., Yamane, Sk. 1994. A review of the East Asian species of *Anoplius* Dufour (Hymenoptera, Pompilidae). *Reports of the Faculty of Science Kagoshima University* (*Earth Sciences and Biology*), 27: 229–244.

Tsuneki, K. 1988. Pompilidae recently collected in the Philippines (Hymenoptera). *Special Publications of the Japan Hymenopterists Association*, 34: 1–55, 61–62.
Wahis, R. 2001. Sur quelques Pompilides orientaux décrits par J. Pérez (1905) et conservés au Muséum national d'Histoire naturelle (Paris) (Hymenoptera, Pompilidae). *Bulletin de la Société entomologique de France*, 106(2): 155–160.

Author's addresses:
Institute of Biology and Soil Science,
Far Eastern Branch of the
Russian Academy of Sciences, Vladivostok, 690022, Russia
E-mail: pompilidaefer@mail.ru, lelej@biosoil.ru

SHORT COMMUNICATION

V. S. Yakubovich[1)], D. Yu. Rogatnykh[2)]. DISTRIBUTION OF THE *PANAGAEUS ROBUSTUS* A. MORAWITZ, 1862 (COLEOPTERA: CARABIDAE) IN KHABAROVSKII KRAI. – Far Eastern Entomologist. 2012. N 243: 15-16.

Summary. The ground beetle *Panagaeus robustus* is widely distributed in the basin of Amur River in Khabarovskii krai (from Khabarovsk to Nikolaevsk-on-Amur).

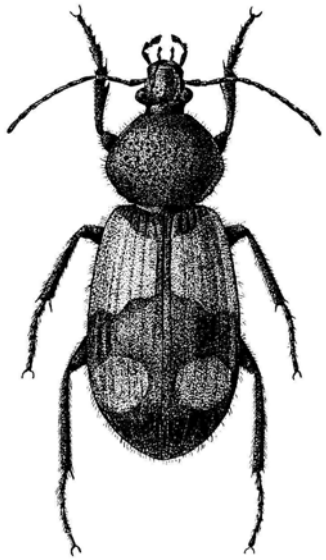
Key words: Coleoptera, Carabidae, fauna, new record, Russian Far East.

В. С. Якубович, Д. Ю. Рогатных. О распространении *Panagaeus robustus* A. Morawitz, 1862 (Coleoptera: Carabidae) в Хабаровском крае // Дальневосточный энтомолог. 2012. N 243. С. 15-16.

Резюме. Жужелица *Panagaeus robustus* широко распространена в Хабаровском крае по долине Амура от Хабаровска до Николевска-на-Амуре.

INTRODUCTION

Previously the ground beetle *Panagaeus robustus* was recorded from North China, Korea, Japan and Russia (Primorskii krai) (Lafer, 1989), though Krivolutskaya (1973) reported it from South Kuril Islands. Later *P. robustus* was recorded from Amurskaya oblast (Rogatnykh, 2007) and the mouth of Amur River in Khabarovskii krai (Kurenshchikov & Yakubovich, 2007). The study of additional material shows that this species is widely distributed in the south part of Khabarovskii krai.



Family Carabidae
Subfamily Panagaeinae

***Panagaeus robustus* A. Morawitz, 1862**
Fig. 1

MATERIAL. **Russia**: Khabarovskii krai, 5 specimens: Ulchskii District, 6 km N mouth of Amgun River, meadow, 30.VI 2006; Nikolaevskii District, between Lake Orel' and Lake Chlya, meadow, 2.VII 2006; vicinity of Khabarovsk, Korfovskii settlement, dirt road, 21.VI 2008; vicinity of Khabarovsk, Bychikha village, 29.V 2009 and 19.VI 2009 (Yakubovich leg.).

Fig. 1. *Panagaeus robustus* (original)

REFERENCES

Kurenshchikov, D. K. & Yakubovich, V.S. 2007. New data concerning the fauna of ground beetles (Coleoptera, Carabidae) of the Amur valley. *In*: Streltsov, A.N. (Ed.). *The animal world of the Far East: collection of scientific works*. Blagoveshchensk. P. 6. (In Russian).

Krivolutskaya, G.O. 1973. *Entomofauna of the Kuril Islands: Principal Features and Origin*. Leningrad: Nauka. 315 p. (In Russian).

Lafer, G.Sh. 1989. Family Carabidae. *In*: Krivolutskaya, G.O., Egorov, A.B., Lafer, G.Sh. & Azarova, N.A. (Eds). *Key to the insects of Soviet Far East. Vol. III. Coleoptera, Pt. 1*. Leningrad: Nauka. P. 71–222. (In Russian).

Rogatnykh, D.Yu. 2007. New records of ground beetles (Coleoptera, Carabidae) from Amur Region. *Euroasian Entomological Journal*, 6(4): 493–495.

Author's addresses:

1) Department of Biology, Far Eastern Medical University,
Murav'ev-Amursky Street 35, Khabarovsk 680000, Russia.
E-mail: Presid_11@mail.ru

2) Amur Branch of Botanical Garden-Institute FEB RAS,
2nd km Ignatevskoye road, Blagoveshensk, 675004, Russia.
E-mail: rogatnykh@yandex.ru

© **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