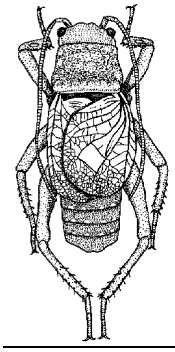

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TAXONOMY OF THE KATYDIDS (ORTHOPTERA: TETTIGONIIDAE) FROM EAST ASIA AND ADJACENT ISLANDS. COMMUNICATION 1

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Four new species and a new subspecies of the subfamily Phaneropterinae (*Elimaea aprilis* **sp. n.**, *E. a. tioman* **subsp. n.**, *E. dongnai* **sp. n.**, *E. sapa* **sp. n.**, *Stictophaula mada* **sp. n.**) as well as a new species of the subfamily Meconematinae (*Euanisous trusmadi* **sp. n.**) are described from Malaysia and Vietnam.

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

А. В. Горохов. Таксономия кузнечиков (Orthoptera: Tettigoniidae) из Восточной Азии и соседних островов. Сообщение 1 // Дальневосточный энтомолог. 2011. N 220. С. 1-13.

Из Малайзии и Вьетнама описаны 4 новых вида и новый подвид подсемейства Phaneropterinae (*Elimaea aprilis* **sp. n.**, *E. a. tioman* **subsp. n.**, *E. dongnai* **sp. n.**, *E. sapa* **sp. n.**, *Stictophaula mada* **sp. n.**), а также новый вид подсемейства Meconematinae (*Euanisous trusmadi* **sp. n.**).

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INTRODUCTION

This paper is a continuation of the previous works by Gorochov (1999, 2001, 2003, 2004, 2009), Gorochov & Kang (2004), Gorochov & Voltshenkova (2009), and Gorochov & Storozhenko (2010) on taxonomy of the tribe Elimaeini and of the

genera *Stictophaula* Heb. (tribe Holochlorini) and *Euanisous* Heb. (subfam. Meconematinae) from East Asia. The material studied here are collected by Russian entomologists and deposited in the Zoological Institute of RAS, St. Petersburg.

DESCRIPTIONS OF NEW TAXA

Subfamily Phaneropterinae

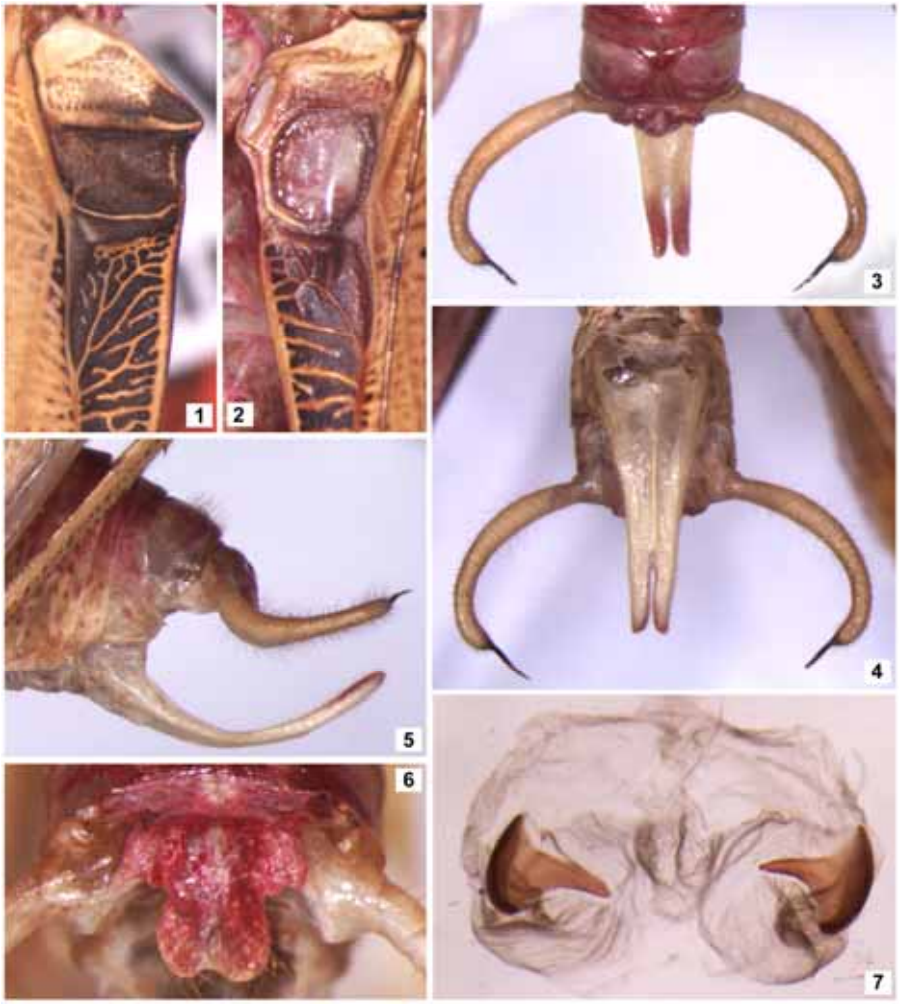
Tribe Elimaeini

***Elimaea* (*Rhaebelimaea*) *aprilis* Gorochov, sp. n.**

Figs 1–9

MATERIAL. Holotype – ♂, Malaysia: Pahang State, Fraser's Hill near border with Selangor State, 17-18 km SW of Raub Town, 1000-1300 m, on leaf of bush in secondary forest, at night, 15-23.IV 2010, A. Gorochov, M. Berezin & E. Tkatsheva. Paratype – ♀, same data as in holotype.

DESCRIPTION. Male. General appearance similar to that of representatives of first (Javanese) group of subgenus *Rhaebelimaea* (Gorochov, 2009: 81-83). Coloration yellowish green with following marks: rostrum of head with rose median stripe; antennae with brown lateral surface of basal segments and slightly lighter (brownish) other segments; pronotum with very light (almost yellowish white) disc, a few rose dots on this disc, dark brown stripe along each lateral edge of disc and a few dots on each lateral lobe near this stripe, reddish dots on rest of these lobes, and blackish hind edge of hind lobe of disc; fore legs with brown spines, proximal and distal parts of tibia, narrow stripe along outer dorsal keel of this tibia, and basal part of basitarsus; other legs with light brown spines and a few dots on middle tibia; dorsal tegminal field with yellowish basal area, brownish (partly semitransparent) stridulatory organ of lower tegmen, and brown all other membranes between veins and veinlets; lateral tegminal field with brown membranes of cells situated along dorsal tegminal field, rose small spots on majority of other cell membranes, and several brown spots along median part of tegmen; hind wings with small brown spots around yellowish green apical part (excepting proximal edge of this part), rose veins and crossveins of rest of wing, and transparent membranes between these veins and crossveins; dorsum of pterothorax and abdomen, epiproct, and dorsal surface of hind lobules of genital plate rose; lateral part of abdominal tergites with rose dots; cerci with brown apical spine. Fore femora distinctly curved and with moderately high dorsal keel; wings long (tegmina distinctly extending behind apex of hind femora, and hind wings distinctly longer than tegmina); tegminal stridulatory apparatus as in Figs 1, 2; epiproct not large, slightly longer than wide, with distal part divided into a pair of short rounded lobules (Fig. 6); cerci moderately long, clearly arcuate, and with long and narrow apical spine directed medially; genital plate moderately long, arcuate in profile, gradually narrowing to not deeply bifurcate distal part; latter part with a pair of rather narrow lateral lobules separated from each other by very narrow median notch (Figs 3-5); genitalia with a pair of almost triangular sclerites lacking any denticles (Fig. 7).



Figs 1–7. *Elimaea aprilis* sp. n., male. 1 – proximal half of dorsal field of left tegmen; 2 – same of right tegmen; 3 – abdominal apex from above; 4 – same from below; 5 – same from side; 6 – epiproct from behind; 7 – genitalia from behind (lateral lobes with sclerites directed aside).

Female. Coloration and structure of body as in male, but tegmina, epiproct, and cerci typical of female of *Rhaebelimaea*, hind edge of hind lobe of pronotal disc almost light brown, middle femora with small brown spot at base, hind femora with numerous rose dots, coloration of lower tegmen as that of upper tegmen, genital plate short and with a pair of long and almost spine-like hind lobes widely separated from each other (Fig. 8), ovipositor as in Fig. 9, its gonangulum with very small ventral tubercle, and base of lower valves of ovipositor with small fold-like lateral lobule.

Length (in mm). Body: ♂ 17, ♀ 20; body with wings: ♂ 38, ♀ 44; pronotum: ♂ 3.9, ♀ 4.1; tegmina: ♂ 28, ♀ 33; hind femora: ♂ 19, ♀ 22; ovipositor 6.

COMPARISON. The new species is most similar to *E.* (*Rh*.?) *jacobsonii* Karny, 1926 from Sumatra in the shape of male cerci, but clearly distinguished by the arcuate male genital plate in profile, distinctly wider its middle part (if to see from below), and narrower its paired distal lobules (see from above).

ETYMOLOGY. The species name originates from *aprilis* (Latin) – April.

***Elimaea* (*Rhaebelimaea*) *aprilis tioman* Gorochov, subsp. n.**
Figs 10–12

MATERIAL. Holotype – ♀, Malaysia: Pahang State, Tioman I. not far from Mersing City (Johor State), eastern coast, environs of Juara Vill., on leaf of bush in primary forest, at night, 6-14.IV 2010, A. Gorochov, M. Berezin & E. Tkatsheva. Paratype – ♀, same data as in holotype.

DESCRIPTION. Female (holotype). Coloration and structure of body parts as in female of nominotypical subspecies, but distal part of fore tibiae slightly lighter, fore basitarsi and middle femora without distinct darkening, and genital plate with almost spine-like hind lobes distinctly shorter (Fig. 10).

Variation. Paratype with lateral stripes of pronotal disc slightly lighter (brown) and with almost spine-like hind lobes of genital plate directed more laterally (Fig. 11, 12).

Male unknown.

Length (in mm). Body 20-22; body with wings 41-43; pronotum 4.3-4.5; tegmina 31-33; hind femora 23-24; ovipositor 6.7-7.

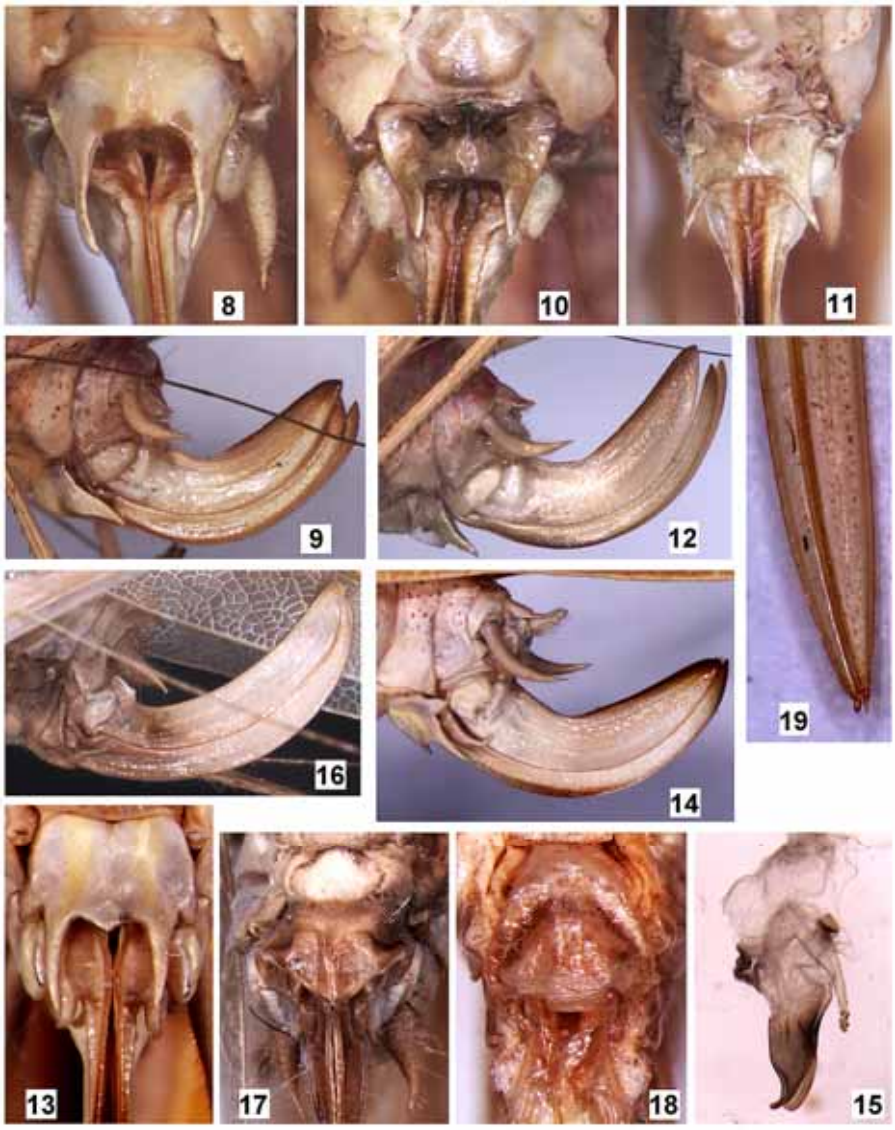
COMPARISON. The new subspecies differs from *E. a. aprilis* in the distinctly shorter hind lobes of female genital plate.

ETYMOLOGY. The subspecies name originates from Tioman I.

***Elimaea* (*Rhaebelimaea*) *dongnai* Gorochov, sp. n.**
Figs 13–15, 20–27

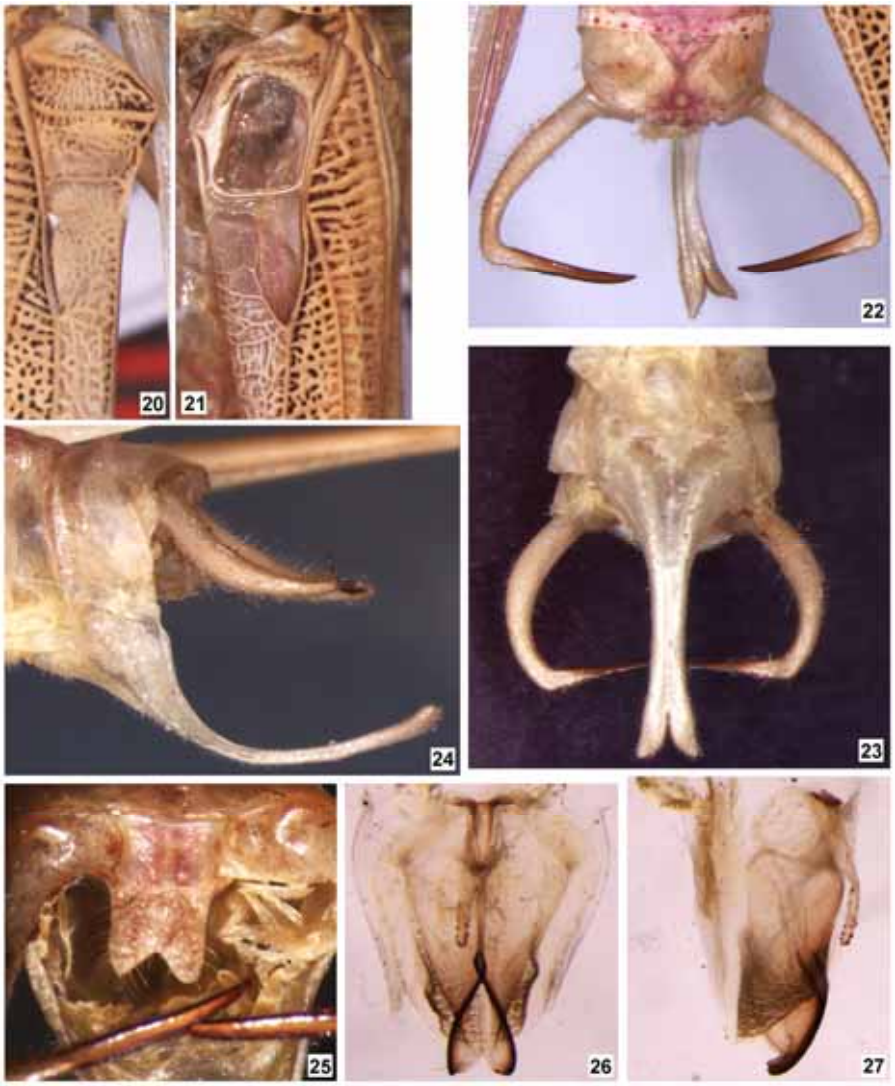
MATERIAL. Holotype – ♂, Southern Vietnam: Dong Nai Prov., Vinh Cuu Distr., Vinh Cuu Nature Reserve (=Ma Da Forest), TW Cuc Forest Station, 11°22’51’’ N, 107°03’44’’ E, 75 m, 21-29.XI 2010, L. Anisyutkin, A. Anichkin, A. Abramov & S. Kruskop. Paratypes: 1 ♂, same reserve as in holotype, but 20-21.III 1991, V. Burakov; 1 ♂, 1 ♀, same province, but Cat Tien National Park, 15-20.XI 2010, L. Anisyutkin & A. Anichkin.

DESCRIPTION. Male (holotype). General appearance as in representatives of seventh group of *Rhaebelimaea* (Gorochov, 2009: 81, 89, 90). Coloration yellowish green with following marks: dorsal surface of head rostrum and majority of longitudinal veins in hind wings rose; lateral surface of basal antennal segments brownish; other antennal segments light brown; numerous dots on upper half of pronotal lateral lobes, on narrow part of tegminal lateral field situated along dorsal tegminal field, and on



Figs 8–19. *Elimaea aprilis* sp. n. (8, 9), *E. aprilis tioman* subsp. n. (10-12), *E. dongnai* sp. n. (13-15), *Stictophaula mada* sp. n. (16, 17), and *Euanisous trusmadi* sp. n. (18, 19). 8, 10, 11, 13, 17, 18 – female genital plate from below; 9, 12, 14, 16 – female abdominal apex from side; 15 – male genitalia from side; 19 – distal part of ovipositor from side.

anal half of yellowish green apical part of hind wings brown; somewhat more sparse dots between tegminal *RA* and *MA* as well as small spots around medial part of stridulatory vein of upper tegmen slightly lighter (brownish); numerous dots on other parts



Figs 20–27. *Elimaea dongnai* sp. n., male. 20 – proximal half of dorsal field of left tegmen; 21 – same of right tegmen; 22 – abdominal apex from above; 23 – same from below; 24 – same from side; 25 – epiproct from behind; 26 – genitalia from above; 27 – same from side.

of tegminal lateral field light rose; stridulatory areas of lower tegmen and majority of membranes of hind wings transparent; median part of third-ninth abdominal tergites light rose; apical cercal spines light brown. Fore femora weakly curved and without distinct dorsal keel; wings similar to those of *E. aprilis*, but tegminal stridulatory apparatus as in Figs 20, 21; epiproct elongate (but not long) and clearly bifurcate at

apex (Fig. 25); cerci moderately long, arcuate, with distal part strongly (almost angularly) curved and having very long and moderately narrow apical spine directed medially; genital plate long, weakly arcuate in profile, strongly narrowing before not deeply bifurcate distal part (Figs 22-24); genitalia with three sclerites (a pair of moderately narrow plate-like lateral sclerites having denticulate hind edge, and thin finger-like median one having denticulate distal part; apex of latter sclerite situated much before apices of above-mentioned paired sclerites; Figs 26, 27).

Variations. Paratypes with additional rose dots on lateral parts of abdominal tergites or completely without rose areas and dots on abdomen; number of denticles on distal part of median genital sclerite varied (Fig. 15).

Female. Coloration and structure of body parts as in holotype, but tegmina, epiproct, and cerci typical of female of *Rhaebelimaea*, dorsal tegminal part almost without darkened parts, coloration of lower tegmen as that of upper tegmen, lateral part of abdominal tergites with rose dots, genital plate with short angular median projection and two pairs of posterolateral lobes (a pair of almost spine-like long lobes directed backwards, and a pair of distinctly shorter and somewhat wider lobes directed partly upwards; Fig. 13), ovipositor as in Fig. 14, its gonangulum with rather short triangular projection on lower part, and base of lower valves of ovipositor with rather small and almost finger-like lateral process directed backwards and having distal part curved upwards.

Length (in mm). Body: ♂ 18-22, ♀ 23.5; body with wings: ♂ 37-40, ♀ 43; pronotum: ♂ 4.1-4.3, ♀ 4.2; tegmina: ♂ 27-29, ♀ 32; hind femora: ♂ 21-23, ♀ 24; ovipositor 6.8.

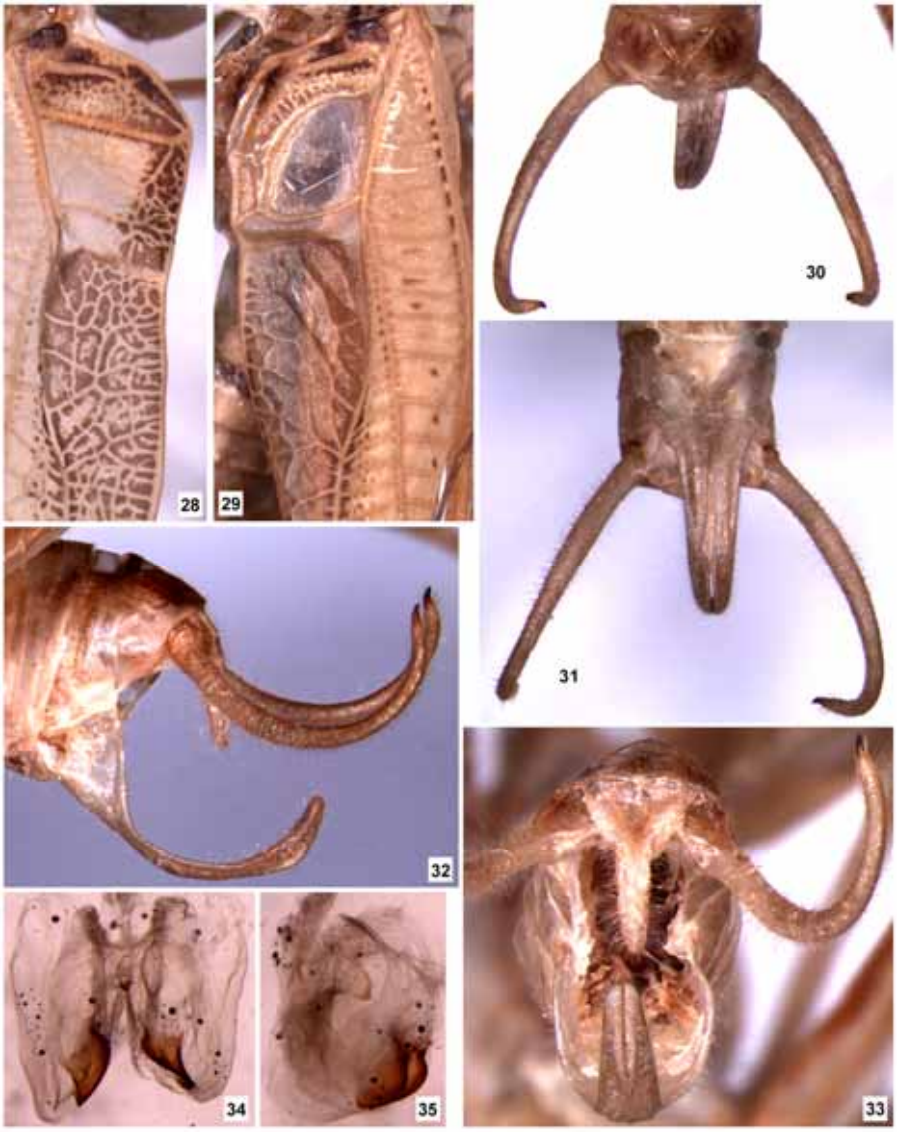
COMPARISON. The new species is most similar to *E.* (*Rh*.) *abramovi* Gorochov, 2009 and *E.* (*Rh*.) *aphana* Gorochov, 2009 from more northern provinces of Vietnam, but it differs from them in the more strongly (almost angularly) curved distal part of male cerci (in *E. abramovi* and *E. aphana*, this curvature is more or less arcuate), distinctly narrower (in profile) paired sclerites of male genitalia, and apex of median (unpaired) sclerite of male genitalia situated much before apices of their paired sclerites. Additionally, it differs from *E. abramovi* in the distinctly longer narrowed part of male genital plate, and from *E. aphana*, in the clearly shorter epiproct with the notched apex. From *E.* (*Rh*.) *pentaspina* Ingrisch, 1998 (Thailand) and *E.* (*Rh*.) *subita* Gorochov, 2009 (Central Vietnam) similar to the new species in the shape of female genital plate and structure of ovipositor base, it differs in the shorter both projection on lower part of gonangulum and basal process of ovipositor lower valves as well as in the lateral lobes of female genital plate wider or directed almost only upwards.

ETYMOLOGY. The species name originates from Dong Nai Prov.

***Elimaea* (*Rhaebelimaea*) *sapa* Gorochov, sp. n.**
Figs 28–35

MATERIAL. Holotype – ♂, Northern Vietnam: Lao Cai Prov., Hoang Lien National Park, 6 km W of Sa Pa Town, northern slope of Phan Si Pan Mt. near Tram Don Vill., 22°21’N, 103°46’E, 2000-2100 m, V 2005, A. Abramov.

DESCRIPTION. Male. General appearance as in majority of species from eighth-thirteenth groups of *Raebelimaea* distributed in Vietnam and Southern China (Gorochov, 2009: 81, 92-100). Coloration yellowish green with following marks: lateral surface of proximal segments of antennal flagellum light brown; other segments



Figs 28–35. *Elimaea sapa* sp. n., male. 28 – proximal half of dorsal field of left tegmen; 29 – same of right tegmen; 30 – abdominal apex from above; 31 – same from below; 32 – same from side; 33 – same from behind; 34 – genitalia from above; 35 – same from side.

of antennal flagellum slightly darker (from brownish to brown), but more darkened part of this flagellum with a few whitish spots; pronotal disc with numerous brown dots; tegmina with brownish cell membranes in dorsal field (excepting large light spot on stridulatory part of upper tegmen and transparent stridulatory areas of lower tegmen) and in narrow part of lateral field situated near (along) dorsal field; wings also with sparse brownish dots between tegminal *RA* and *MA*, and with more numerous brownish dots around yellowish green apical part of hind wings (excepting its proximal edge); longitudinal veins of hind wings light rose, and majority of membranes of these wings transparent. Fore femora almost as in *E. dongnai*; wings as in *E. aprilis*, but somewhat longer and with tegminal stridulatory apparatus as in Figs 28, 29; epiproct rather long, comparatively narrow, and with narrowly rounded apex; cerci long, distinctly arcuate, with apical spine short and slightly hooked; genital plate long, distinctly arcuate in profile, gradually narrowing to rather deeply bifurcate distal part; latter part with a pair of narrow lateral lobules separated from each other by very narrow median notch (Figs 30–33); genitalia with large paired plate-like sclerites having denticulate posteromedial edge and with very short (but almost finger-like) and slight median sclerite lacking distinct denticles (Figs 34, 35).

Female unknown.

Length (in mm). Body 20; body with wings 48; pronotum 5; tegmina 36; hind femora 25.

COMPARISON. The new species is most similar to *E.* (*Rh*.) *bavi* Gorochov, 2009 from Northern Vietnam in the structure of male genitalia, but mirror in lower tegmen somewhat narrower and with much narrower semisclerotized part of membrane, male cerci longer and less strongly curved, male epiproct without apical notch, and male genitalia with smaller paired sclerites and without second median sclerite. From *E. abramovi*, *E. aphana*, and *E. dongnai*, the new species differs in the pronotal disc with the numerous darkish dots (pronotal lateral lobes without such dots), longer wings, short apical spine of male cerci, and much shorter median sclerite of male genitalia lacking distinct denticles; from E. maya Gorochov, 2009 (Southern China), in the more curved male cerci, narrower mirror of lower tegmen, and presence of median sclerite in male genitalia; and from all the other species of eighth-thirteenth groups of *Rhaebelimaea*, in the distinctly wider dorsal tegminal field behind mirror, much longer male cerci, non-denticulate male genital plate, almost round (in profile) paired sclerites of male genitalia, or much shorter membranous lobes of these genitalia which are not extending behind apex of genital sclerites.

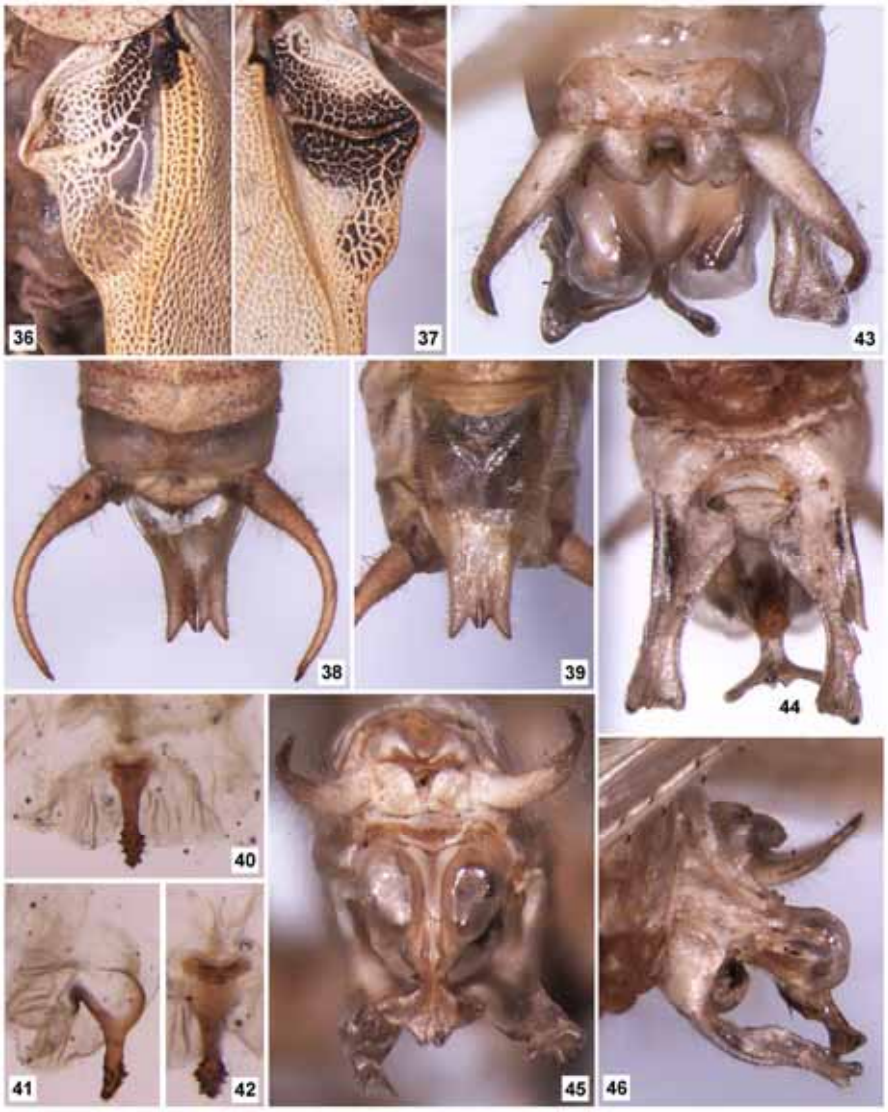
ETYMOLOGY. The species name originates from Sa Pa Distr.

Tribe Holochlorini

***Stictophaula mada* Gorochov, sp. n.**
Figs 16, 17, 36–42

MATERIAL. Holotype – ♂, Southern Vietnam: Dong Nai Prov., 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. Paratypes: 1 ♀, same data as in holotype; 1 ♀, same province, but Cat Tien National Park, 15-20.XI 2010, L. Anisyutkin & A. Anichkin.



Figs 36–46. *Stictophaula mada* sp. n. (36–42) and *Euanisous trusmadi* sp. n. (43–46), male. 36 – proximal half of dorsal field of left tegmen; 37 – same of right tegmen; 38, 43 – abdominal apex from above; 39, 44 – same from below; 40 – median sclerite of genitalia from above; 41 – same from side; 42 – same from below; 45 – abdominal apex from behind; 46 – same from side.

DESCRIPTION. Male. General appearance typical of genus *Stictophaula* (Gorochov, 1999, 2003, 2004; Gorochov, Kang, 2004; Gorochov, Voltshenkova, 2009). Coloration light green with following marks: stripes along lateral edges of head rostrum and numerous dots on pronotum and on second-eighth abdominal tergites rose; fore femora with blackish spines and numerous dots (these dots partly fused with each other and forming five reticulate spots on dorsal surface); fore tibiae with sparse brown dots, but membranes of both tympana with narrow dark brown spots; other spines of legs light brown; tegmina with large dark brown spot on stridulatory part of dorsal field of upper tegmen, distinctly smaller one on basal area of dorsal field of lower tegmen, brownish (semitransparent) stridulatory areas of latter tegmen, row of almost blackish cell membranes along anal edge of both tegmina (separated from previous dark spots by distinct light interspace), several small brownish grey spots on lateral field around *MA*, and very small and very sparse darkish dots between branches of *RS*. Stridulatory apparatus as in Figs 36, 37; epiproct rather wide, triangular; cerci thin, moderately long, arcuate, and with more or less acute apical part directed partly upwards; genital plate elongate, with distinctly narrower hind median lobe having very narrow median notch, a pair of rather narrow and short hind medial processes, and a pair of distinctly longer and almost triangular hind lateral processes (Figs 38, 39); male genitalia with one large median sclerite and a pair of small lateral ones; median genital sclerite (Figs 40-42) with finger-like hind process (distal half of this process with rather numerous and comparatively large denticles) and two proximal plates (dorsal plate with long and narrow median ribbon directed forwards and having anterior part roundly curved downwards, and shorter ventral plate directed mainly downwards and provided with wide and short lower area separated from other part of this plate by transverse fold).

Female. General view as in male, but tegmina, epiproct, and cerci typical of female of *Stictophaula*, tegmina almost without darkenings on dorsal field and less distinct darkened spots on lateral field, genital plate short and practically triangular (Fig. 17), and ovipositor as in Fig. 16 (its gonangulum with small ventral tubercle, and base of lower valves with small fold-like lobule and very small tubercle under this lobule).

Length (in mm). Body: ♂ 18, ♀ 17-21; body with wings: ♂ 42, ♀ 40-43; pronotum: ♂ 5.6, ♀ 5-5.2; tegmina: ♂ 33, ♀ 31-34; hind femora: ♂ 20, ♀ 17-19; ovipositor 7.3-7.7.

COMPARISON. The new species is most similar to *S. gialaiensis* Gorochov, 1999 (Central Vietnam) including shape of male genital sclerites, but clearly distinguished by the much deeper hind median notch of male genital plate and distinctly wider lower area of ventral proximal plate of median sclerite in male genitalia.

ETYMOLOGY. The species name originates from Ma Da Forest.

Subfamily Meconematinae
Tribe Meconematini

***Euanisous trusmadi* Gorochov, sp. n.**
Figs 18, 19, 43–46

MATERIAL. Holotype – ♂, Malaysia, Sabah State (Borneo), Trus Madi Mt., ~1000 m, partly primary / partly secondary forest, at light, 13-25.V 2007, A. Gorochov. Paratype – ♀, same data as in holotype.

DESCRIPTION. Male. General appearance similar to that of *E. notabilis* Gorochov, 2001 from Sumatra (Gorochov, 2001). Coloration uniformly light greenish, but with light brown distal part of spines and hooks. Pronotum with rather long hind lobe almost completely covering tegminal stridulatory organ; tegminal *RS* c 4-5 branches; hind wings hardly longer than tegmina. Epiproct consisting of a pair of strongly curved hooks; their distal part (directed forwards) narrow and long; cerci almost straight (rather simple), but with thin and slightly hooked apical part; genital plate with very deep median notch (having characteristic shape), three small rounded projections at apex of each lateral lobe of this plate, and very small dorsal spinule near this apex (Figs 43, 44, 46); genitalia with large sclerotized plate exposed behind epiproctal hooks; this plate with very strongly inflated lateral parts, transverse lamellar widening of apical part (having a pair of small hind tubercles partly fused with each other), and rather narrow "neck" between latter widening and more proximal part (having above-mentioned inflations); ventral surface of this plate with dense bundle of hairs (Figs 43-46).

Female. Coloration and structure of body parts as in male, but hind pronotal lobe somewhat shorter, tegmina with 3-4 branches of *RS* and without stridulatory organ, epiproct and cerci as in female of other representatives of *Euanisous*, genital plate as in Fig. 18 (hind median lobe of this plate slightly curved upwards), and ovipositor almost straight and with apical part gradually narrowing to acute apex (Fig. 19).

Length (in mm). Body: ♂ 16, ♀ 14; body with wings: ♂ 26, ♀ 29; pronotum: ♂ 5.1, ♀ 4.7; tegmina: ♂ 20, ♀ 22; hind femora: ♂ 11, ♀ 11.8; ovipositor 14.5.

COMPARISON. The new species is most similar to *E. perforatus* Sänger et Helfert, 2000 (Thailand) and *E. notabilis*, but distinguished by the somewhat longer distal part of male epiproctal hooks directed forwards, more curved (almost hooked) apical part of male cerci, smaller and rounded apical projections of male genital plate, and clearly more strongly inflated lateral parts of sclerotized plate of male genitalia. From *E. distinctus* (Redtenbacher, 1891) described from Java and Malacca, *E. teuthroides* (Bolivar, 1905) from Singapore, and *E. mirabils* (Karny, 1923) from Penang I., it differs in the distinctly narrower "neck" of sclerotized plate of male genitalia situated before apical widening of this plate.

ETYMOLOGY. The species name originates from Trus Madi Mt.

ACKNOWLEDGEMENTS

I thank all my colleagues collecting and turning over the material for my study. This work is supported by the Russian Foundation for Basic Research (project No 10-04-00682) and Presidium of the Russian Academy of Sciences (Program "Biosphere Origin and Evolution").

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SHORT COMMUNICATION

M. G. Krivosheina. FIRST RECORD OF THE SHORE-FLY *CHLORICHAETA ORBA* MATHIS ET ZATWARNICKI, 1993 (DIPTERA, EPHYDRIDAE) FROM THAILAND. – Far Eastern Entomologist. 2011. N 220: 14-16.

Summary. The shore-fly *Chlorichaeta orba* Mathis et Zatwarnicki, 1993 is registered in Thailand for the first time. The species is similar to *Ch. mais* Mathis et Zatwarnicki, 1993 in external morphology, but differing in coloration and sculpture of head, thorax and scutellum, and in the morphology of male terminalia.

Key words. Diptera, Ephydridae, *Chlorichaeta orba*, Thailand, new record.

М.Г. Кривошеина. Первое указание мухи-береговушки *Chlrorichaeta orba* Mathis et Zatwarnicki, 1993 (Diptera, Ephydridae) из Таиланда // Дальневосточный энтомолог. 2011. N 220. С. 14-16.

Резюме. Муха-береговушка *Chlorichaeta orba* Mathis et Zatwarnicki, 1993 впервые обнаружена в Таиланде. Морфологически вид близок *Ch. mais* Mathis et Zatwarnicki, 1993, от которого отличается окраской и скульптурой поверхности головы, груди и щитка, а также строением терминалий самца.

INTRODUCTION

The genus *Chlorichaeta* Becker, 1922 belongs to the tribe Gymnomyzini, subfamily Gymnomyzinae. It includes seven species (Mathis & Zatwarnicki, 1995). Shore flies of this genus are known only from the Old World and distributed mainly in Afrotropical, Oriental and Australasian/Oceanian regions. The only *Ch. albipennis* (Loew, 1848) occurs in temperate regions of Palaearctic also. Three species were registered in Oriental Region: *Ch. albipennis* (Loew, 1848), *Ch. orba* Mathis et Zatwarnicki, 1993 and *Ch. tuberculosa* Becker, 1922. Only one of them, *Ch. tuberculosa,* was known formerly from Thailand (Mathis & Zatwarnicki, 1993).

Representatives of the genus are small (1.5-3.1 mm) mostly black flies with shiny to subshiny body, dorsum of thorax microtomentose, subshiny to dull. Face with many small pits around midfacial protuberance, pits with silvery-white microtomentum; parafacials with a vertical row of shallow horizontal grooves; parafacials near anteroventral margin of eye with silvery white microtomentum. Fore femur significantly more swollen than mid and hind ones and armed with a ridge near midlength, process bearing a row of 4-5 stout setae along anterior half of posteroventral margin. Wing milky white. Basitarsomere colour varying in different species. Abdomen black without microtomentum, more finely granulose than scutum.

Natural history of the representatives of *Chlorichaeta* is studied well enough: adults feed as general scavengers in concentrated organic matter such as manure of terrestrial animals, including tortoise droppings, pig pens near settlements, on rotting seaweed. Adults are attracted to moisture on animals and are frequently associated with livestock (camels, cattle, donkeys, pigs) (Mathis & Zatwarnicki, 1993). We observed *Chlorichaeta* species on open hot sand and stones near streams.

Present paper is a continuation of my taxonomic work on Ephydridae of East Asia (Krivosheina, 2008, 2009, 2010). The studied materials collected by N. Vikhrev in Thailand are deposited in the in Zoological Museum, Moscow University.

NEW RECORD

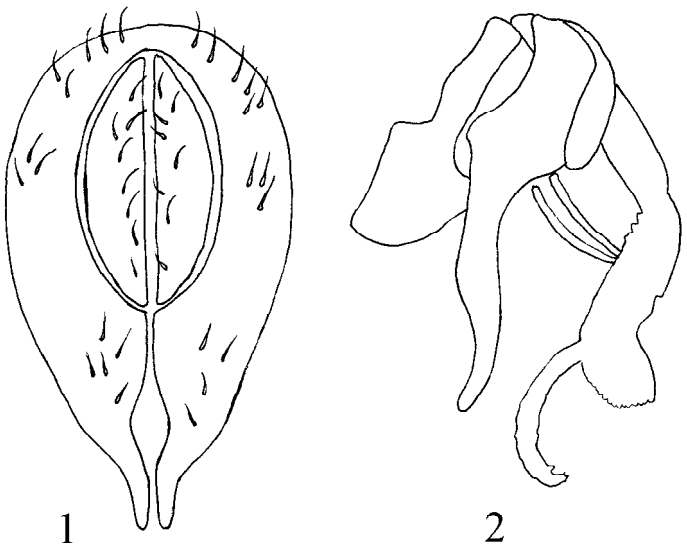
***Chlorichaeta orba* Mathis et Zatwarnicki, 1993**
Figs 1–2

MATERIAL. Thailand: Phuket (north part of island), 17-24.II 2009, 2 ♂, 1 ♀ (N.E. Vikhrev).

DESCRIPTION.Very small fly (1.8-2.6 mm). The species belongs to the group with yellow hind basitarsomere as well as tarsomeres 2 and 3 which are yellow too. *Ch. orba* is closer to *Ch. mais* Mathis & Zatwarnicki, 1993 differing from it in the following characters: extended ocellar triangle shiny and smooth similar to parafrons (not granulose), silvery-white microtomentum on parafacials as 2 (not 3) patches; scutum very lightly microsculptured, scutellum more so, appearing granulose, scutum with some metallic bluish (not bronzish-gold) luster, halter yellow.

Male terminalia with surstylus digiform in lateral view, narrowly rounded apically, curved anteroventrally (Figs 1-2). Hypandrium in lateral view L-shaped with anteromedial portion slender, aedeagal apodeme enlarged towards attachment with hypandrium, postgonite linear without a process, distiphallus slightly longer than basiphallus, angulate, dorsal angle acutely produced, rounded, bearing 1 pair of slender lateral processes at base and a single medial process.

DISTRIBUTION. The species was described from Sri Lanka (Mathis & Zatwarnicki, 1993). It was found in Philippines, Australia (Northern Territory) and Papua New Guinea too (Mathis & Zatwarnicki, 1995). Herein this species is firstly mentioned from Thailand.



Figs 1–2. Male genitalia of *Chlorichaeta orba*. 1 – epandrium and surstyli, posterior view; 2 – internal male genitalia, lateral view.

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SHORT COMMUNICATION

N. E. Vikhrev. ON THE SYNONYMY OF THE PALAEARCTIC SCIOMYZIDAE (DIPTERA). – Far Eastern Entomologist. 2011. N 220: 17-20.

Summary. Two new synonyms of the Palaearctic flies of the family Sciomyzidae are established: *Tetanura pallidiventris* Fallén, 1820 = *Tetanura fallenii* Hendel, 1923, **syn. n.**; *Sciomyza testacea* Macquart, 1835 = *Sciomyza sebezhica* Przhiboro, 2001, **syn. n.**

Key words. Diptera, Sciomyzidae, taxonomy, new synonymy.

Н. Е. Вихрев. К синонимии палеарктических Sciomyzidae (Diptera) // Дальневосточный энтомолог. 2011. N 220. С. 17-20.

Резюме. Для палеарктических двукрылых семейства Sciomyzidae установлена новая синонимия: *Tetanura pallidiventris* Fallén, 1820 = *Tetanura fallenii* Hendel, 1923, **syn. n.**; *Sciomyza testacea* Macquart, 1835 = *Sciomyza sebezhica* Przhiboro, 2001, **syn. n.**

INTRODUCTION

The examination of rich material stored in Zoological Museum of Moscow University (ZMUM) allows clarifying the synonymy of two Palaearctic species of Sciomyzidae.

RESULTS AND DISCUSSION

***Tetanura pallidiventris* Fallén, 1820**

Fig. 1

Tetanura pallidiventris Fallén, 1820: 10. Type locality: Esperod (Sweden).

Tetanura fallenii Hendel, 1923: 206. Type locality: "Donau-Auen bei Wien" (Austria); **syn. n.**

MATERIAL. Russia: **Moscow Region**, Dmitrov env., 56.3166ºN 37.7594ºE, 12-27.VI 2007-2010, 2♂, 13♀ (N. Vikhrev); Golitsyno env., 11-23.VI 1973-1983, 4♂, 4♀ (A. Shatalkin); Izmailovo park, 16.VI 2007, 1♂, 1♀ (A. Ozerov); Naro-Fominsk env., 05.VI 2007, 1♀ (D. Gavryushin); **Novosibirsk Region**, Novosibirsk, Academy town, 54.8ºN 83.1ºE, 19.VI 2008, 1♀ (O. Kosterin); **Krasnoyarsky Krai**, Krasnoyarsk env., 56ºN 92ºE, 14-23.VII 2009, 9♀ (K. Tomkovich); **Amur Region**, Zeya env., 53.8ºN 127.3ºE, 21.VI-11.VII 1981-1982, 35♂, 1♀ (A. Shatalkin, A. Ozerov, M. Krivosheina): **Primorsky Krai**, Kamenushka env., 46.7ºN 135.9ºE, 13.VI-27.VII 1983-1984, 8♂, 1♀ (A. Shatalkin); **Sakhalin Region**, Kunashir Is., Mendeleev Volcano env., 44.0ºN 145.7ºE, 17-29.VII 1985, 3♂ (S. Churkin).

DISTRIBUTION. North and Central Europe (Rozkošný, 1987; Vala, 1989), Russia, Japan (Sueyoshi, 2001).

REMARKS. The genus *Tetanura* Fallén, 1820 has several aberrant characters for Sciomyzidae: male gonostyli reduced, female with peculiar flat ovipositor, arista subapical, typical submedian *a*-seta on *f2* absent, only 1 (posterior) notopleural seta present.

Tetanura fallenii was described from a male and female collected in Austria. The type material was not found in Naturhistorisches Museum, Vienna and seems to be lost (Rozkošný, 1987), so the diagnostic characters of *T. fallenii* follow from the original description only (Hendel, 1923):

– Body mostly yellow including scutum; anterior cross-vein placed beyond middle of discal cell; live (or fresh) specimens have eyes with median stripe fused with upper one anteriorly ……..*fallenii*

– Body mostly brown, scutum darker; anterior cross-vein placed at middle of discal cell; eyes with median stripe not fused with upper one ……. *pallidiventris*

Rozkošný (1987) and Vala (1989) expressed doubts in the validity of *T. fallenii*. I have found all 85 specimens collected in European Russia, West and East Siberia and in Far East (including the Kuril Islands) conspecific. The male terminalia were examined and found similar. Examined specimens showed significant and continual variations of the characters proposed as diagnostic ones for *T. fallenii*.

Body colour: pleura brown to mostly yellowish, disc of scutum from entirely dark brown to light brown on the center and widely yellow along the edges. Abdomen from yellow to brown.

Wing: anterior crossvein placed from middle to distal third of discal cell, usually slightly beyond middle. Anterior crossvein may be reduced to the point where veins R_{4+5} and M converge. Wing darkening (anterior margin and around crossveins) from hardly distinct to distinct and extensive.

Stripes on the eyes seems to be rather an useless character being absent in the museum material, but nevertheless, from my own experience in field observation of *Tetanura* and mounting fresh specimens I can assert that these stripes look very different depending on the angle of view and may look either fused or not fused.

Fig. 1. *Tetanura pallidiventris* Fallén, female (photo by D. Gavryushin).

In addition a curious variability in chaetotaxy of the scutum is found. Two pairs of posterior *dc* (rarely 1) followed by 3-5 fine setulae in *dc* position, these setulae usually are differently placed on the left and the right sides. Postalar calli with 2 or 1 setae and 1-3 setulae of different length. In slightly less than half of the specimens an additional "wandering" seta is present on left or right side of scutum, it is placed between the posterior

dc and postalar calli but slightly in more anterior position. The basal pair of scutellar setae is sometimes absent.

The variability between specimens collected in the same site and date is similar to that between specimens collected at such distant localities as East Europe, Siberia and Far East. The only geographical difference found was: in the southern localities such as Prymorsky Krai and Kunashir Island the body size is typically 4-4.5 mm; in the northern localities with more continental climate the typical body size is 3-3.5 mm. Therefore *T. fallenii* is considered as a pure synonym of *T. pallidiventris*.

***Sciomyza testacea* Macquart, 1835**

Sciomyza testacea Macquart, 1835: 406. Type locality: North France.

Sciomyza sebezhica Przhiboro, 2001: 184. Type locality: Russia, Pskov Region, Anninskoe Lake; **syn. n.**

MATERIAL. Russia: **Komi Region**, Vorkuta, 67.5ºN 64.0ºE, 20.VII 2010, 1♂, 4♀ (N.Vikhrev); **Kursk Region**, Streletskaya steppe, 51.6ºN 36.10ºE, 25.V 2007, 1♀ (A. Ozerov); **Nenets Region**, Naryan-Mar, 67.63ºN 53.0ºE, 10.VII 2008, 1♂, 1♀ (A. Ozerov).

DISTRIBUTION. North and South Europe, Turkey (Rozkošný, 1987; Vala, 1989).

REMARKS. *Sciomyza sebezhica* was described from the single male holotype, "*imago reared from shore substratum collected 30.IX 1997 in the zone of water line*" (Przhiboro, 2001). Two females reared from the same lake were identified as *S. testacea*. It is not always advisable to describe new species from a single specimen, but let us consider the diagnostic characters offered. "*Diagnosis. A small-sized species with tawny mesonotum, black 3rd antennal segment, mesopleura only with small hairs…*" (Przhiboro, 2001) – this part of the diagnosis completely fits that of *S. testacea*; "*…fore and hind tibiae with only 1 preapical seta. The male terminalia distinctive*" (Przhiboro, 2001) – this part of the diagnosis is discussed below.

1. "*Fore tibiae with only 1 preapical seta*". The presence of some new structure sometimes unmistakably indicates the new species, but the absence of tibial preapical seta requires examination of the variability on representative series and correlation with other characters. *S. testacea* is an uncommon fly which is not numerous in collections, but even the examination of the few specimens listed above shows that dorsal preapical setae on the fore tibia is a matter of significant variability: whereas the one in more anterior position is always strong, the second seta in more posterior position is variable from as strong as the anterior one to very weak, so the total absence of this seta in some specimen is not surprising at all. Discussing significance of the absence of the second dorsal preapical seta on the fore tibia Przhiboro (2001) apply a double standard. On the one hand, in spite of absence of this seta, he places the specimen into genus *Sciomyza* due to the similarity with *S. testacea*. On the other hand, he regards it as a new species which differs from *S. testacea* due to the absence of the same seta. I can agree with the first solution only.

2. "*Hind tibiae with only 1 preapical seta*". As for preapical setae on the hind tibia, neither anybody else proposed it as diagnostic character for *Sciomyza*, nor Przhiboro (2001) discussed reliability of this character. I don't think that this new idea is a good one: in fact *S. simplex* and *S. dryomyzina* usually have two preapical setae present, but 5 of 8 examined specimens of *S. testacea* have only one dorsal preapical on the hind tibia.

3. "*Male terminalia distinctive*". I don't think so. The comparison of male terminalia with that of *S. simplex* seems unnecessary, but I can't find difference between drawing of

terminalia of *S. sebezhica* with that of *S. testacea* (see Vala, 1989), neither I found any indication in the text.

That is why I see no reasons to regard *S. sebezhica* as a valid species.

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