

**Taxonomy of Podoscirtinae (Orthoptera: Gryllidae).****Part 10: American taxa of the tribe Aphonoidini****Таксономия подсемейства Podoscirtinae (Orthoptera: Gryllidae).****Часть 10: американские таксоны трибы Aphonoidini**

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The systematic position and composition of the endemic American subtribe *Diatrypina* **stat. nov.** (from *Diatrypini* Desutter, 1988) are discussed. This group is put in the tribe *Aphonoidini* as one of its two subtribes: *Diatrypina* and *Aphonoidina* **stat. nov.** The genus *Prodiatrypa* Desutter, 1988, originally included in “*Diatrypini*”, is transferred to the subtribe *Tafaliscina* of the tribe *Paroecanthini*. One new subgenus, 25 new species and four new subspecies are described. Nine species, erroneously included in the genera belonging to some other tribes, are transferred to the genus *Diatrypa* Saussure, 1874: *Paroecanthus exaetos* Otte, 2006 (*D. exaetos* **comb. nov.**), *P. pipizon* Otte, 2006 (*D. pipizon* **comb. nov.**), *P. optivus* Otte, 2006 (*D. optivus* **comb. nov.**), *P. desumptus* Otte, 2006 (*D. desumptus* **comb. nov.**), *P. eudoxos* Otte, 2006 (*D. eudoxos* **comb. nov.**), *Orocharis legnotos* Otte, 2006 (*D. legnotos* **comb. nov.**), *O. apogon* Otte, 2006 (*D. apogon* **comb. nov.**), *O. epipolios* Otte, 2006 (*D. epipolios* **comb. nov.**), *O. tolmeros* Otte, 2006 (*D. tolmeros* **comb. nov.**).

Систематическое положение и состав эндемичной американской подтрибы *Diatrypina* **stat. nov.** (от *Diatrypini* Desutter, 1988) обсуждаются. Эта группа помещена в трибу *Aphonoidini* как одна из ее двух подтриб: *Diatrypina* и *Aphonoidina* **stat. nov.** Род *Prodiatrypa* Desutter, 1988, первоначально включенный в “*Diatrypini*”, переведен в подтрибу *Tafaliscina* трибы *Paroecanthini*. Описаны один новый подрод, 25 новых видов и четыре новых подвида. Девять видов, ошибочно отнесенные к родам из некоторых других триб, включены в род *Diatrypa* Saussure, 1874: *Paroecanthus exaetos* Otte, 2006 (*D. exaetos* **comb. nov.**), *P. pipizon* Otte, 2006 (*D. pipizon* **comb. nov.**), *P. optivus* Otte, 2006 (*D. optivus* **comb. nov.**), *P. desumptus* Otte, 2006 (*D. desumptus* **comb. nov.**), *P. eudoxos* Otte, 2006 (*D. eudoxos* **comb. nov.**), *Orocharis legnotos* Otte, 2006 (*D. legnotos* **comb. nov.**), *O. apogon* Otte, 2006 (*D. apogon* **comb. nov.**), *O. epipolios* Otte, 2006 (*D. epipolios* **comb. nov.**), *O. tolmeros* Otte, 2006 (*D. tolmeros* **comb. nov.**).

**Key words:** crickets, taxonomy, America, Orthoptera, Gryllidae, Podoscirtinae, Aphonoidini, *Diatrypina*, new taxa

**Ключевые слова:** сверчки, таксономия, Америка, Orthoptera, Gryllidae, Podoscirtinae, Aphonoidini, *Diatrypa*, новые таксоны

**INTRODUCTION**

This paper is the tenth communication in the series of publications on taxonomy of Podoscirtinae. In the previous communications, the tribes Podoscirtini and Aphonoidini from the Old World (Gorochov, 2002,

2003, 2004, 2005, 2006, 2007, 2008) as well as Podoscirtini and Paroecanthini from the New World (Gorochov, 2010, 2011) were discussed.

Most part of the material examined is deposited at the Zoological Institute, Russian Academy of Sciences, St Petersburg

(ZIN); two specimens are deposited at the Natural History Museum, London (NHM). Most of the specimens studied were collected in tropical forests at night, on leaves of trees and bushes or at light.

## TAXONOMIC PART

In 1986 the subfamily Podoscirtinae was divided into five tribes: Podoscirtini, Aphonoidini, Paroecanthini, Hapithini and Phaloriini (Gorochov, 1986). Later some new suprageneric taxa were described: Neomorphini, Aphonomorphini, Neometrypini, Tafaliscinae and Diatrypini (Desutter, 1988). All Desutter's taxa belong to the Podoscirtinae, but they were included by their author in two "families" (Podoscirtidae and Eneopteridae) which I consider as subfamilies. In 1995 the Phaloriini was removed from the subfamily Podoscirtinae, and the Neomorphini was united with the tribe Hapithini (Gorochov, 1995). Recently the Aphonomorphini and Neometrypini were included in the tribe Podoscirtini as its subtribes Aphonomorphina and Neometrypina (but the latter subtribe was included only tentatively; Gorochov, 2010), and the Tafaliscinae was put in the tribe Paroecanthini as its subtribe Tafaliscina (Gorochov, 2011). However, the position of the Diatrypini has been uncertain up to now.

The type genus of this "tribe" (*Diatrypa* Saussure, 1874) has important similarity to the Indo-Malayan and Australo-Oceanian tribe Aphonoidini. All their species are rather small; their males have the genitalia with a rather large spermatophore sac (Figs I: 4–9), and spermatophore strongly curved (the apex of spermatophore ampulla inside these genitalia in the resting state is directed more or less backwards but not forwards, i.e., it is located in a more or less posterior position relative to the most part of these genitalia); their females have the apical part of the ovipositor very similar, provided with characteristic apical hooks and subapical projections on the upper valves (the apical hooks are short, strongly curved and medially located, and the subapical projec-

tions are almost angular and situated much more laterally than the previous hooks; Figs II: 1–6). These characters of male genitalia and of ovipositor (especially the shape of the drilling part of ovipositor) are not typical of the rest of Podoscirtinae or unique to this subfamily, respectively.

It is therefore reasonable to consider this "tribe" as a subtribe of Aphonoidini which differs from the nominotypical subtribe mainly in the plesiomorphic characters: metanotum is usually provided with an attractive gland (this gland has disappeared in the subtribe Aphonoidina **stat. nov.**); tegminal stridulatory apparatus of male is well developed (Fig. I: 1), but it is strongly reduced or absent in Aphonoidina; fore tibia has both tympana opened and not reduced (Figs I: 2, 3), however in Aphonoidina, one tympanum is usually reduced or obliterated (rarely both tympana are obliterated or well developed); ectoparameres of male genitalia are undeveloped or almost undeveloped (Figs I: 5, 6), although in Aphonoidina, they are always well developed; endoparameres are articulated with some other structures but not ectoparameres, although in Aphonoidina, they are articulated only with ectoparameres (Figs I: 8, 9). The subtribes have different distribution: one of them, having the above-mentioned plesiomorphic characters, is known only from tropical America; the nominotypical subtribe is known from Indochina, Australia, and islands around them. Thus, the remarks on the historic geography of Aphonoidini published by Gorochov (2008) apply to the subtribe Aphonoidina only.

## Order ORTHOPTERA

### Family GRILLIDAE

#### Subfamily PODOSCIRTINAE

#### Tribe APHONOIDINI

Subtribe **DIATRYPINA** Desutter, 1988, **stat. nov.**

Desutter (1988) included two genera in her tribe Diatrypini: *Diatrypa* (type genus)

and *Prodiatrypa* Desutter, 1988 with a single species (*Diatrypa annulicornis* Chopard, 1912) from French Guiana. However, the picture of *P. annulicornis* male tegmen given in the original description of this species (Chopard, 1912) clearly shows that this species has the stridulatory vein distinctly S-shaped and oblique veins not angularly curved; such features are characteristic of the tribe Paroecanthini but not of *Diatrypa* (this vein is not S-shaped in all the species of *Diatrypa*). Judging by the beautiful pictures of Desutter, *Diatrypa* and *Prodiatrypa* are very different in the structure of male genitalia; in *Prodiatrypa*, these genitalia are without a distinct spermatophore sac (which is characteristic of *Diatrypa* and all the other representatives of Aphonoidini) but with clear ectoparameres, rather long endoparameral apodemes and a distinct mold of the spermatophore attachment plate, i.e., this genus must be included in the subtribe Tafaliscina of the tribe Paroecanthini. The most interesting difference of *Prodiatrypa* from the other genera of Tafaliscina studied by me is the presence of a rather large guiding rod (in the latter genera of Tafaliscina, the guiding rod is usually indistinct or somewhat reduced; Gorochov, 2011). So, at present the Diatrypina includes only one genus, and the diagnoses of this subtribe and its type genus are identical (see below).

#### Genus *Diatrypa* Saussure, 1874

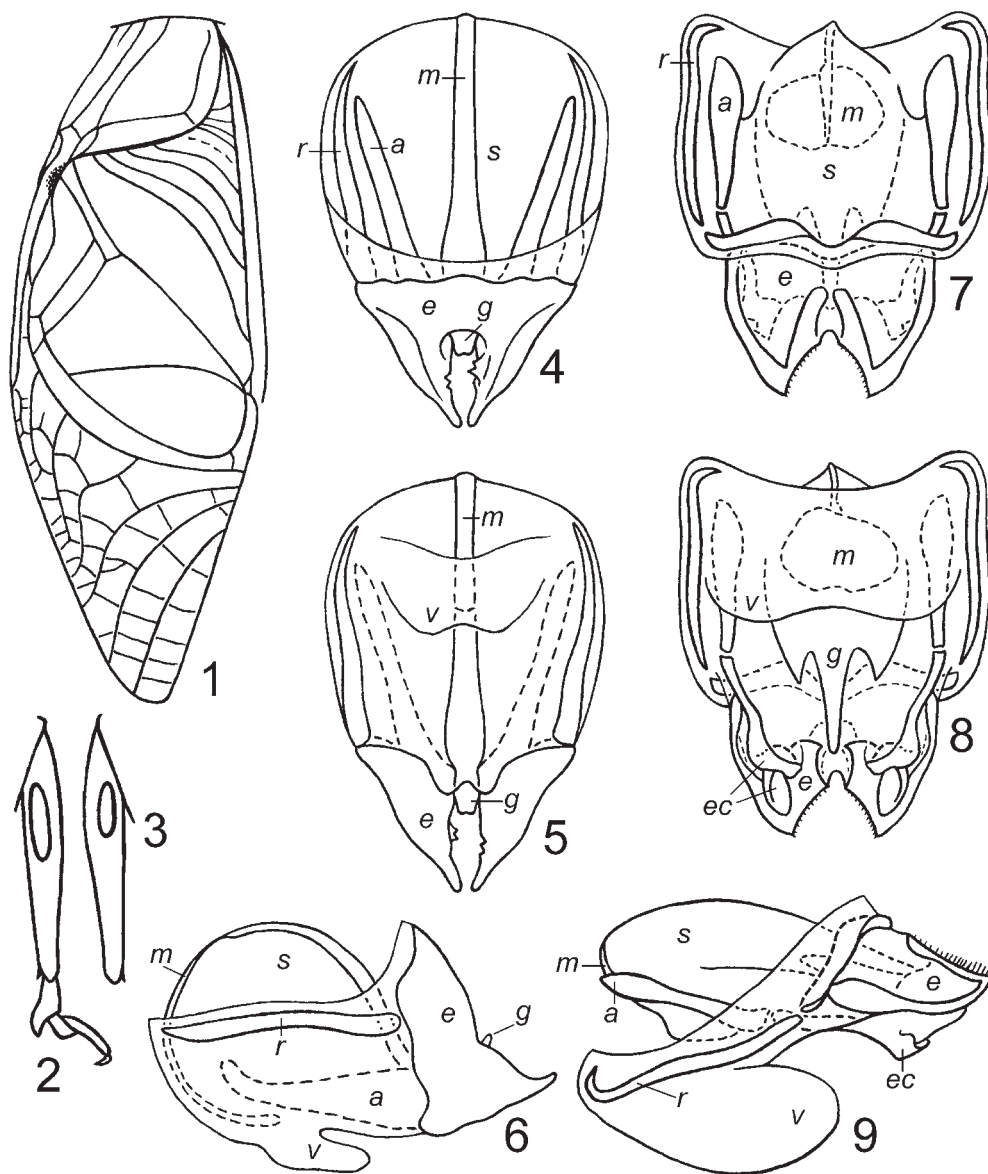
Type species: *Diatrypa tolteca* Saussure, 1874 (Mexico).

*Diatrypys* Saussure, 1897 (unjustified emendation).

*Note.* This genus is characterized by the following features: body is rather small; head and pronotum are normal for Aphonoidini; metanotum is usually with an attractive gland (as in the most part of Podoscirtinae but not in Aphonoidina); tegmina of male are with a well developed stridulatory apparatus having the stridulatory vein more or less straight or arcuate (but not S-shaped),

oblique veins normal (not very strongly curved), mirror large and partly rounded or almost oval, arcuate cell (situated along the distal edge of the mirror) almost not interrupted by any longitudinal branch but usually with one or a few veins looking as crossveins (Figs I: 1; IV; VII; IX); legs are also normal for Aphonoidini but with both tympana well developed and opened (outer tympanum is somewhat larger than inner one; Figs I: 2, 3); male abdomen often has small lobes, tubercles or a convexity with hairs on two anterior tergites (Figs III: 1–4, 7, 13, 14, 20); anal and genital plates are rather simple in both sexes, with a rounded or almost truncate apex (in male, the genital plate is moderately elongate, and in female, it has a deep posteromedian notch); epiphallus consists of a rather wide and high plate-like anterior part, and a distinctly narrower and lower posterior part divided into two lateral lobes by a deep posteromedian notch (these parts are distinctly separated from one another by a rather strong bend well visible in the profile); ectoparameres are undeveloped or almost undeveloped; endoparameres have long apodemes and are articulated with the guiding rod and/or epiphallus; mold of spermatophore attachment plate is fused with the base of guiding rod and forms a long semimembranous ribbon running along the median part of the spermatophore sac (Figs I: 4–6; V; VI; VIII; X–XII); ovipositor has the apical part typical of the tribe Aphonoidini (Figs II: 1–3). The presence of a well developed stridulatory apparatus in the male tegmina and of both tympana in the fore tibiae in combination with the absence of distinct ectoparameres in the male genitalia clearly distinguish this genus and the subtribe Diatrypina from representatives of the subtribe Aphonoidina.

Until now, the genus has contained 29 species: type species; *Diatrypa ornata* Saussure, 1874 from Surinam; *D. tuberculata* Saussure, 1874 from Argentina; *Diatrypys castanea* Saussure, 1878 from Brazil; *D. championi* Saussure, 1897 and *D. apithoi-*

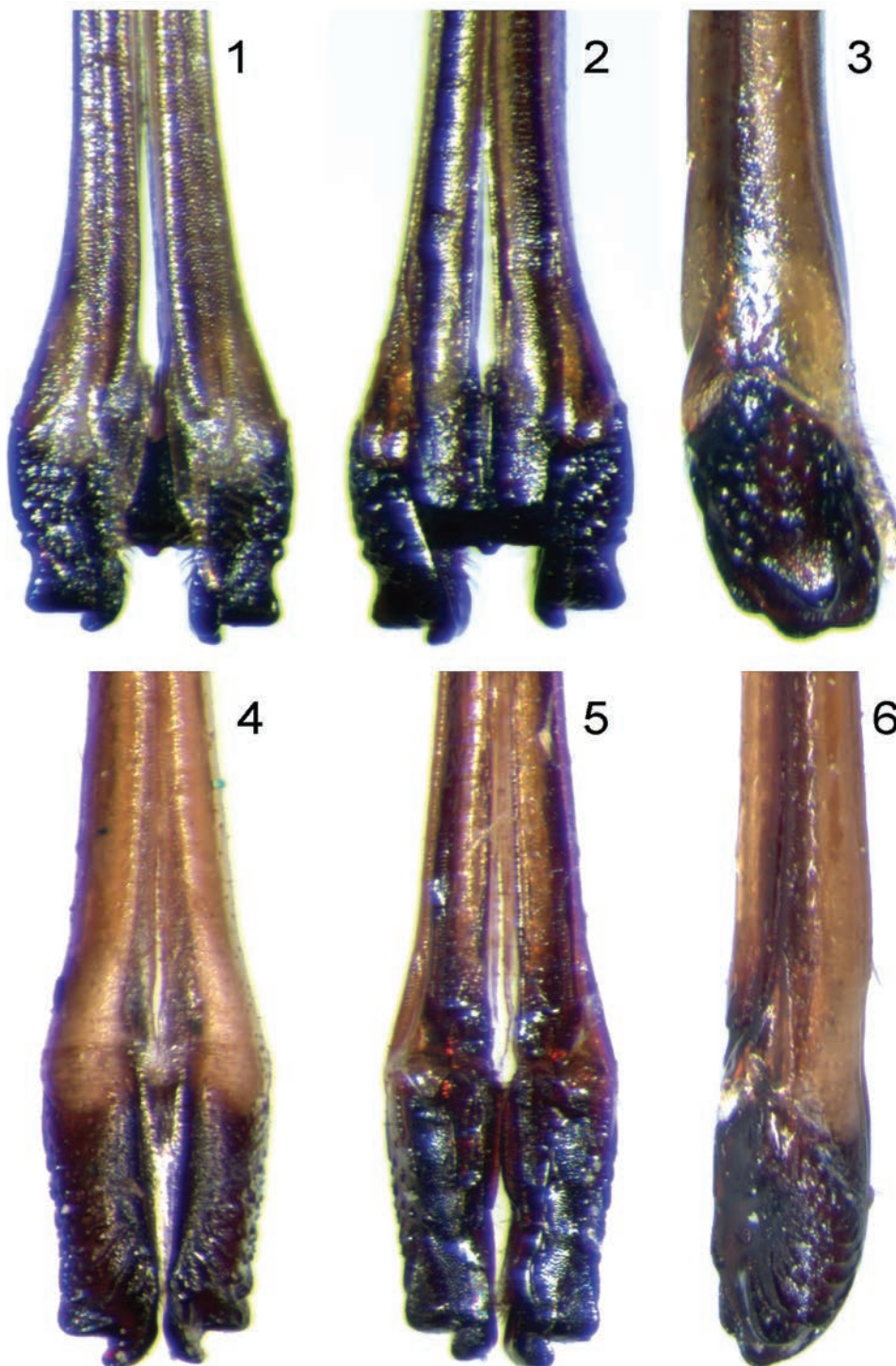


**Figs I (1–9).** *Diatrypa* (Diatrypina) and *Aphonoides* (Aphonoidina), male: 1–6, *D. raggei* **sp. nov.**; 7–9, *A. karnyi*. Dorsal field of right tegmen (1); inner side of both fore tibia and tarsus (2); outer side of fore tibia (3); genitalia from above (4, 7), from below (5, 8), and from side (6, 9). Abbreviations: *a*, apodeme of endoparamere; *e*, epiphallus; *ec*, ectoparamere; *g*, guiding rod; *m*, mold of spermatophore attachment plate; *s*, spermatophore sac; *r*, ramus; *v*, membranous valve. [7–9, after Gorochov (1990)].

*des* Saussure, 1897 from Panama; *D. jansoni* Saussure, 1897 from Nicaragua; *Diatrypa colombiana* Bruner, 1916 from Colombia; *D. benoisti* Chopard, 1925, *D. brunnea* Chopard, 1912, *D. guyanensis* Chopard,

1912, *D. pallidilabris* Chopard, 1912 and *D. longixipha* Chopard, 1929 from French Guiana; *D. univittata* Hebard, 1928 from Panama; *D. affinis* Chopard, 1931 from Brazil; *D. allardi* Chopard, 1956, *D. latipennis*





**Figs II (1–6).** *Diatrypa* (Diatrypina) and *Mistshenkoana* (Aphonoidina): 1–3, *D. decora morona* subsp. nov.; 4–6, *M. baduri*. Distal part of ovipositor from above (1, 4), from below (2, 5), and from side (3, 6).

Chopard, 1956, *D. schunkei* Chopard, 1956 and *D. minuta* Chopard, 1956 from Peru; *D. splendens* Costa Lima, 1958 from Brazil; *D. aethes*, *D. choristos*, *D. bellulus*, *D. fugitivus*, *D. plectilis*, *D. entimos*, *D. ennychios*, *D. klagesi* and *D. nicaragua* described by Otte & Perez-Gelabert (2009) from Nicaragua (only the latter species) and from the "Caribbean" islands (all the others).

*Paroecanthus exaetos* (*D. exaetos* **comb. nov.**), *P. pipizon* (*D. pipizon* **comb. nov.**), *P. optivus* (*D. optivus* **comb. nov.**), *P. desumptus* (*D. desumptus* **comb. nov.**), *P. eudoxos* (*D. eudoxos* **comb. nov.**), *Orocharis legnotos* (*D. legnotos* **comb. nov.**), *O. apogon* (*D. apogon* **comb. nov.**), *O. epipolios* (*D. epipolios* **comb. nov.**) and *O. tolmeros* (*D. tolmeros* **comb. nov.**) from Costa Rica, mistakenly described by Otte (2006) as representatives of two very different genera belonging to different tribes (Paroecanthini and Hapithini), are included in the genus *Diatrypa* at the first time. It is impossible to understand the reason for these mistakes, because in a later publication, the same author (Otte & Perez-Gelabert, 2009) identified this distinct genus more correctly; however, he has not corrected these obvious mistakes in his electronic catalogue (Eades et al., 2013). Also, 25 new species of this genus are described below. Thus, at present 63 species indubitably or probably belong to the genus *Diatrypa*; the species with the male tegmina and/or male genitalia studied are divided here into two subgenera (see the key below).

1. Tegmina narrow and not shortened, with clearly longitudinal mirror in male (Figs IV: 1–5); hind wings long, with distal part distinctly exposed behind tegmina. Epiphallus in male genitalia with a pair of large spine-like posterodorsal lobes directed upwards or partly upwards/partly forwards (Figs V: 3, 7, 11, 15, 17) . . . subgenus ***Diatrypa*** s. str. [*D. tolteca* (type species); *D. tolmeros*; *D. nicaragua*; *Diatrypa* (*Diatrypa*) *decora* **sp. nov.**; *D. (D.) signata* **sp. nov.**; *D. (D.) diluta* **sp. nov.**; *D. (D.) atrata* **sp. nov.**; possibly *D. tuberculata*, *D. jansoni*, *D. colombiana* and *D. pallidilabris*]

- Wings more diverse in length (often somewhat shortened); male tegmina wide or moderately wide and with mirror transverse or almost as long as wide (Figs I: 1; IV: 6; VII: IX). Epiphallus of male genitalia without any large posterodorsal lobes (however sometimes with rather small dorsal lobes directed more or less upwards but shifted from apical or subapical position to position near anterior part of epiphallus) (Figs I: 6; VI: 3, 5, 8, 10, 13, 15; VIII: 3, 5, 8, 11, 14, 16; X: 3, 5, 8, 12, 14; XI: 3, 5, 8, 11; XII: 3, 5, 8, 10, 13, 15) . . . . . subgenus ***Latispeculum*** **subgen. nov.** [*D. (Latispeculum)* *robusta* **sp. nov.** (type species); *D. championi*; *D. benoisti*; *D. brunnea*; *D. affinis*; *D. allardi*; *D. latipennis*; *D. schunkei*; *D. exaetos*; *D. pipizon*; *D. optivus*; *D. desumptus*; *D. eudoxos*; *D. aethes*; *D. choristos*; *D. bellulus*; *D. fugitivus*; *D. plectilis*; *D. entimos*; *D. ennychios*; *D. klagesi*; *D. (L.) satipo* **sp. nov.**; *D. (L.) chaco* **sp. nov.**; *D. (L.) coca* **sp. nov.**; *D. (L.) venado* **sp. nov.**; *D. (L.) brevis* **sp. nov.**; *D. (L.) aguarico* **sp. nov.**; *D. (L.) angulata* **sp. nov.**; *D. (L.) chamela* **sp. nov.**; *D. (L.) dentata* **sp. nov.**; *D. (L.) borisi* **sp. nov.**; *D. (L.) nikitai* **sp. nov.**; *D. (L.) raggei* **sp. nov.**; *D. (L.) aequatori* **sp. nov.**; *D. (L.) nebulosa* **sp. nov.**; possibly *D. splendens*]

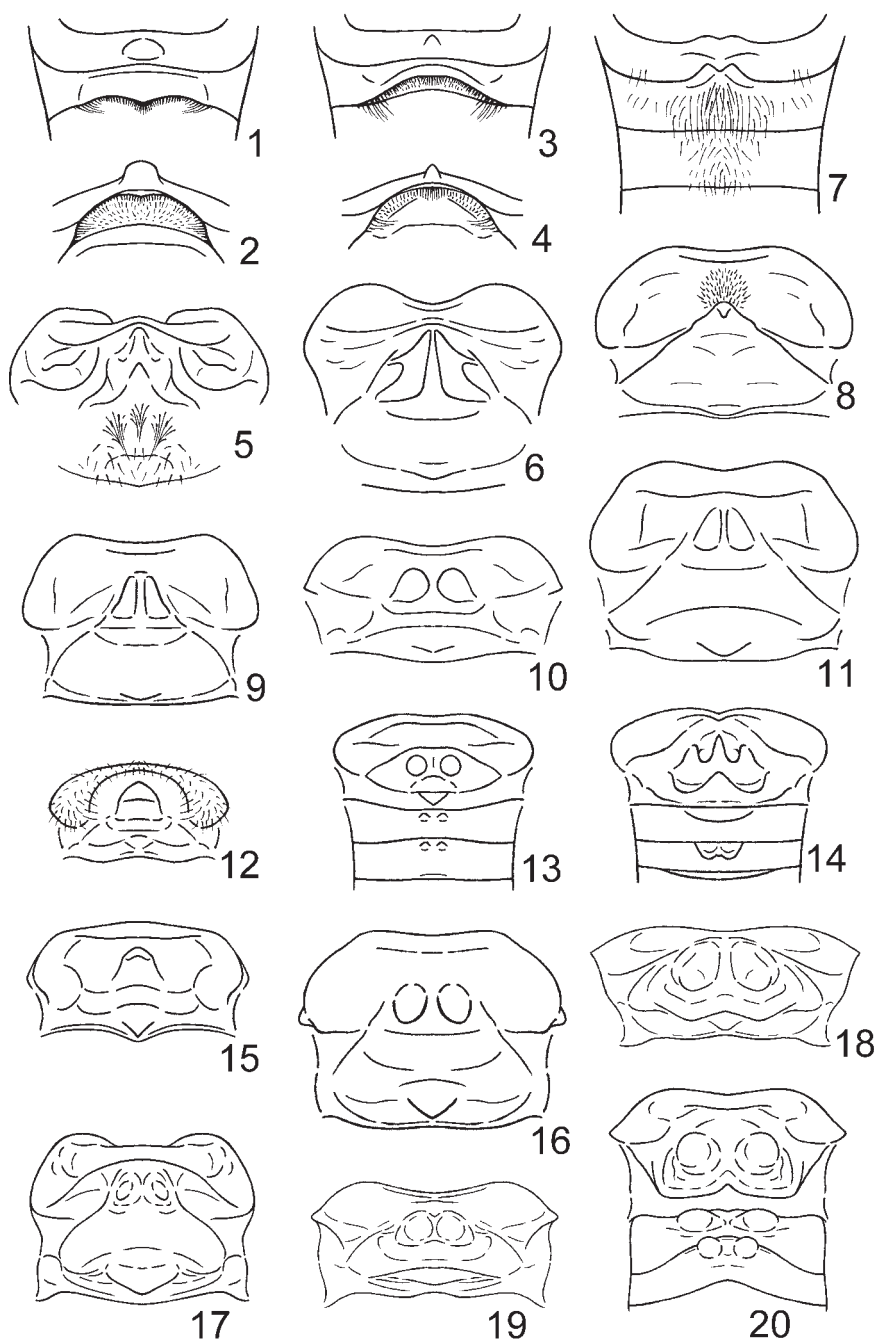
All the other congeners are either insufficiently described or known only from females: *D. apithoides*; *D. ornata*; *D. castanea*; *D. guyanensis*; *D. longixipha*; *D. univittata*; *D. minuta*; *D. legnotos*; *D. apogon*; *D. epipolios*; *D. maculata* **sp. nov.**; *D. striata* **sp. nov.**; *D. lineata* **sp. nov.**; *D. punctata* **sp. nov.**; *D. volodymyri* **sp. nov.**; *D. variegata* **sp. nov.** Their subgeneric position remains uncertain.

***Diatrypa* (*Diatrypa*) *decora* **sp. nov.****  
(Figs III: 1, 2; IV: 1; V: 1–4)

**Holotype.** Male; **Peru**, Junin Department, Satipo Prov., ~25 km SE of Satipo Town, environs of Rio Venado Vill., ~1200 m, partly primary / partly secondary forest, at light, 20–23 Oct. 2008, A. Gorochov, M. Berezin, L. Anisutkin, E. Tkatsheva, V. Izersky (ZIN).

**Paratypes.** Three males, same data as for holotype (ZIN).

**Description.** Male (holotype). Colouration of body light (yellowish with grayish



**Figs III (1–20).** *Diatrypa*, male: 1, 2, *D. decora decora* subsp. nov.; 3, 4, *D. decora morona* subsp. nov.; 5, *D. signata* sp. nov.; 6, 7, *D. dihuta* sp. nov.; 8, *D. atrata* sp. nov.; 9, *D. satipo* sp. nov.; 10, *D. chaco* sp. nov.; 11, *D. venado* sp. nov.; 12, *D. brevis* sp. nov.; 13, *D. aguarico* sp. nov.; 14, *D. angulata* sp. nov.; 15, *D. chamela* sp. nov.; 16, *D. dentata* sp. nov.; 17, *D. nikitai* sp. nov.; 18, *D. aequatorialis* sp. nov.; 19, *D. nebulosa* sp. nov.; 20, *D. robusta* sp. nov. Two (1–4) and three (7) anterior tergites of abdomen from above (1, 3, 7) and from behind and slightly above (2, 4); metanotum (5, 6, 8–12, 15–19) and metanotum with two anterior abdominal tergites (13, 14, 20) from above.

tinge) with following pattern: frons between lower halves of antennal cavities (including rostral apex) and narrow border along ventral edges of these cavities dark brown; dorsum of head light brown with posterolateral parts brown and area between upper halves of antennal cavities intermediate between brown and light brown; epicranial areas behind eyes brown; antennae with two proximal segments brown and other segments from light brown to yellowish; pronotal disc light brown with brown lateral parts; lateral lobes of pronotum almost dark brown with narrow light stripe along each ventral edge; dorsal tegminal field almost transparent and with veins situated along proximal 2/3 of medial edge grayish brown (this field in lower tegmen additionally with most veins slightly darkened); lateral tegminal field also almost transparent but with most part of *Sc* stock and of *R* as well as areas between these veins and between *R* and *M* (including crossveins) grayish brown (Fig. IV: 1); exposed part of hind wings grayish brown; legs uniformly light brown; rest of body with upper half of pterothorax and of abdomen (including anal plate) from grayish brown to dark brown, but most part of pleurites, lower parts of tergites, and cerci yellowish. Head rather short and clearly flattened dorsoventrally; eyes large, slightly longer than wide; scape almost 1.3 times as wide as rostrum between antennal cavities; maxillary palpi with subapical segment short and apical segment strongly widening towards apex. Pronotum with lateral sides almost parallel, disc subquadrate, anterior edge of disc straight, posterior edge of disc weakly convex (almost obtusely angular); lateral lobes moderately high (their length and height approximately equal); metanotum only with rather deep transverse fold on dorsum not far from its proximal edge. Tegmina almost reaching middle third of hind tibiae, with 6–9 oblique veins; stridulatory vein short, somewhat oblique, and rounded in lateral half; chords long, weakly curved; mirror approximately twice as long as wide and with dividing vein located at

middle of its length; apical area moderately long (Fig. IV: 1); area between *M* and *R* weakly widened; area between *R* and *Sc* narrow; *Sc* comb with 7–8 branches; hind wings long, reaching distal part of hind tibiae. Legs rather slender; fore tibia with tympana opened; outer tympanum rather large and elongate, inner one slightly larger (longer) and partly immersed; hind tibia with 9–10 articulated spines rather short and situated in distal half of tibia; hind basitarsus with four outer and two inner denticles. Abdomen with special gland (Fig. III: 1, 2) consisting of rather narrow and short median process of first tergite (this process with truncate apex), and wide and rather high median convexity of second tergite (this convexity with deeply concave posterior surface covered with numerous small hairs); anal plate with apical part wide and roundly truncate; genital plate weakly elongate and with apical part rounded; genitalia with posterior (narrowed) part of epiphallus rather long and having a pair of large spine-like posterodorsal lobes directed mainly forwards; anterior (widened) part of epiphallus rather low (but distinctly higher than its posterior part), with rounded median notch and a pair of small angular projections around this notch as well as a pair of large invaginations under these notch and projections (Figs V: 1–4).

Variations. Antennae sometimes with two proximal segments light brown and other segments yellowish; tegminal area between medial chords sometimes weakly darkened; venation of tegmina slightly varied; hind basitarsus sometimes with four or five outer and one inner denticles; genital plate sometimes with hardly distinct apical notch.

Female unknown.

Length in mm. Body 9–9.5; body with wings 14.3–14.8; pronotum 1.6–1.9; tegmina 9–10; hind femora 6–6.5.

*Comparison.* The new species is similar to *D. pallidilabris* in the colouration of head and structure of body (especially by the shape of male tegmen and of its mirror), but



it differs from the latter in the most part of head dorsum light brown, and dividing vein of mirror located at the middle of its length (*vs.* distinctly in the proximal half of mirror). Male genitalia of *D. pallidilabris* may be unknown, since those of the Peruvian specimen pictured by Chopard (1956: fig. 4, m) as belonging to this species are very similar to the genitalia of *D. diluta* **sp. nov.** (for comparison see Figs V: 9, 10, 18); however, the latter species is clearly distinguished from *D. pallidilabris* by the uniform colouration of head and some characters of stridulatory apparatus. Genitalia of the male from Nicaragua also identified by Otte & Perez-Gelabert (2009: fig. 440, G) as *D. pallidilabris* are clearly different from those of *D. decora* (in the much wider posterodorsal epiphallic lobes) and from the above-mentioned Chopard's picture. From *D. tolteca* and *D. jansoni*, the new species differs in a distinctly longer or narrower mirror and a longer apical area in the male tegmina; from *D. nicaragua*, in the posterior (narrowed) part of epiphallus distinctly longer and posterodorsal epiphallic lobes directed mainly forwards (not vertically upwards); from *D. tuberculata* and *D. colombiana*, in the non-uniform colouration of head and pronotum; and from all the other congeners, in the above-mentioned body colouration in combination with the presence of several (more than two) denticles of hind basitarsus, a narrow dorsal field of male tegmina, long tegminal apical areas, long hind wings, and characteristic male genitalia.

**Etymology.** This name is the Latin word "*decora*" (suitable).

***Diatrypa (Diatrypa) decora morona***  
**subsp. nov.**

(Figs II: 1–3; III: 3, 4; IV: 2)

**Holotype.** Male; **Ecuador**, Morona Santiago Prov., bank of Rio Morona near border with Peru, environs of Puerto Morona Vill., ~300 m, primary forest, at light, 5–15 Jan. 2010, A. Gorochov (ZIN).

**Paratypes.** Three females, same data as for holotype; 1 female, **Peru**, bank of Rio Morona

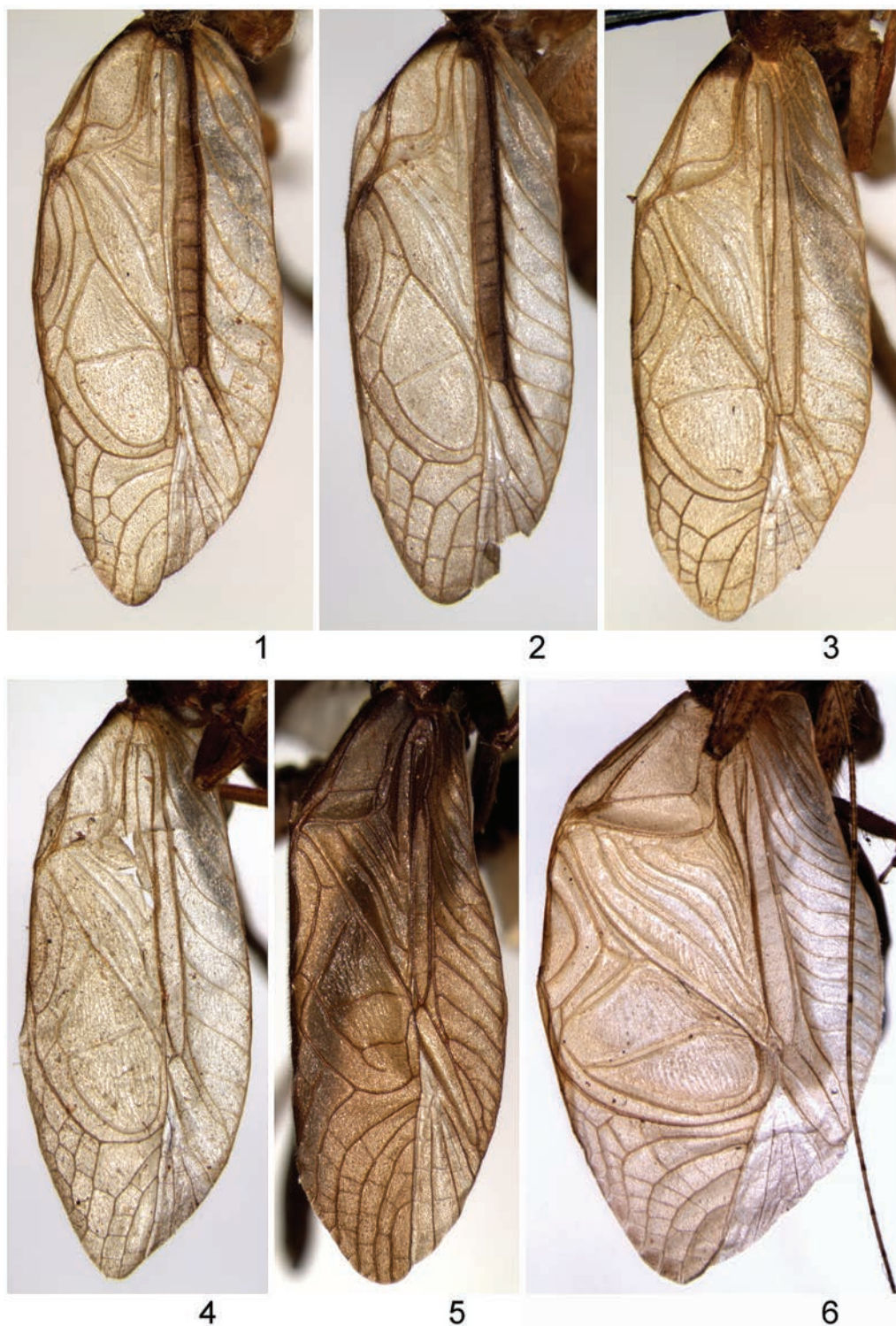
approximately at middle of distance between mouth of this river and its Ecuadorian part, 200–300 m, primary forest, at light, 24–27 Jan. 2010, A. Gorochov (ZIN).

**Description.** Male (holotype). Colouration and external structure of body very similar to those of holotype of nominotypical subspecies but with following differences: proximal part of abdominal tergites lighter (light brown); anterior transverse fold of metanotum lower (weakly developed); distal part of tegminal mirror somewhat narrower (Fig. IV: 2); hind basitarsus with four outer and one inner denticles; first abdominal tergite with median process distinctly smaller, denticle-like (Figs III: 3, 4); second abdominal tergite with median convexity clearly shorter and lower, and with posterior surface of this convexity much less concave and with distinctly narrower (lower) area occupied by hairs (Figs III: 3, 4). Genitalia practically indistinguishable from those of *D. decora decora* **stat. nov.**

**Female.** General appearance as in male, however dorsum of head and pronotal disc usually darker (uniformly brown, but in one female from Ecuador, almost dark brown), dorsal tegminal field grayish brown and with 6–7 almost longitudinally parallel main veins (only 1–2 lateral ones branching from *Cu* in distal part of tegmen) and sparse crossveins, lateral tegminal field with *Sc-R* area distinctly wider and *Sc* comb having 4–5 brown or light brown branches, tegminal *R-M* area clearly narrower and more or less light, and anal plate smaller as well as with rounded and not wide apex. Genital plate weakly elongate and narrowing towards apex; this apex with distinct angular notch; ovipositor slightly shorter than hind femur, with apex as in Figs II: 1–3.

Length in mm. Body: male 9, female 8–9; body with wings: male 14.3, female 14–15; pronotum: male 1.7, female 1.7–1.9; tegmina: male 9, female 8.7–9.3; hind femora: male 6, female 6–6.5; ovipositor 5.7–6.2.

**Comparison.** Differences from the nominotypical subspecies of this species are given in the description of male of *D. dec-*



**Figs IV (1–6).** *Diatrypa*, right tegmen of male: 1, *D. decora decora* subsp. nov.; 2, *D. decora morona* subsp. nov.; 3, *D. signata* sp. nov.; 4, *D. diluta* sp. nov.; 5, *D. atrata* sp. nov.; 6, *D. satipo* sp. nov.

*ora morona*. From *D. pallidilabris*, the new subspecies differs in the same characters as *D. decora decora* and also in the ovipositor slightly shorter than hind femur (in *D. pallidilabris*, ovipositor somewhat longer than hind femur).

**Etymology.** The subspecies is named after the Morona River.

***Diatrypa (Diatrypa) decora izyaslavi* subsp. nov.**

(Figs XIII: 1, 2)

**Holotype.** Female; **Mexico**, Veracruz State, 15–20 km NE of Catemaco Town, Los Tuxtlas (biostation of Mexico University), 2 km from sea coast, rainforest on hills, from tree, 17 Sept. 1989, coll. I. Kerzhner (ZIN).

**Description.** Female (holotype). General appearance very similar to that of *D. decora decora*, but with following differences: body size somewhat larger; dorsum of head yellowish (including its anterior part situated between upper halves of antennal cavities) but with hind part of vertex brown (Fig. XIII: 1); yellowish stripe along ventral edge of each pronotal lobe approximately twice as wide (Fig. XIII: 2); tegmina and abdominal apex almost as in female of *D. decora morona* but with membranes of dorsal tegminal field somewhat lighter (light gray, semitransparent), membranes between tegminal *Sc* and *R* distinctly lighter (also light gray and semitransparent), six longitudinal veins in dorsal tegminal field (two of them branching from *Cu* in distal part of tegmen), and 5–6 branches of *Sc* comb in lateral tegminal field.

Male unknown.

Length in mm. Body 10; body with wings 16.3; pronotum 2.1; tegmina 10.2; hind femora 7; ovipositor 6.5.

**Comparison.** The new subspecies differs from the other two subspecies of this species in a more uniform colouration of tegmina (in *D. decora izyaslavi*, the colouration of tegminal *Sc-R* area is not darkened, i.e., it is the same as in the rest of tegmina; but in *D. decora decora* and *D. decora morona*, this area is darkened, distinctly darker than the rest of tegmina). From *D. pallidilabris* (also

similar to the new subspecies by a contrast head colouration), *D. decora izyaslavi* differs in most part of head dorsum light, and in ovipositor shorter than hind femur.

**Etymology.** The species is named in honour of its collector, outstanding Russian entomologist Dr. Izyaslav Kerzhner.

***Diatrypa (Diatrypa) signata* sp. nov.**

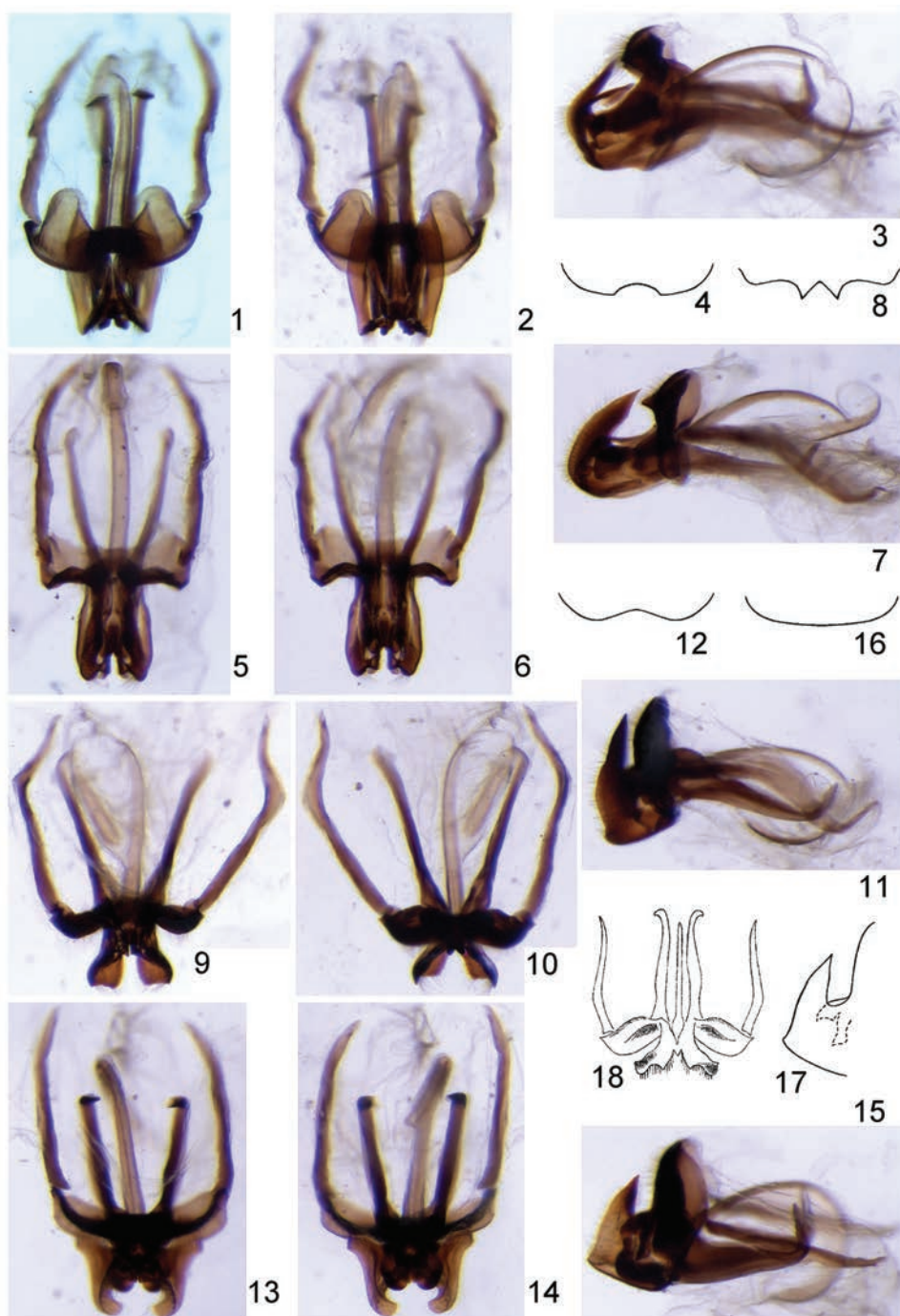
(Figs III: 5; IV: 3; V: 5–8)

**Holotype.** Male; **Peru**, Junin Department, Satipo Prov., ~25 km SE of Satipo Town, environs of Rio Venado Vill., ~1200 m, partly primary / partly secondary forest, at light, 20–23 Oct. 2008, A. Gorochov, M. Berezin, L. Anisyutkin, E. Tkatsheva, V. Izersky (ZIN).

**Paratypes.** Five males, same data as for holotype; 1 male, same province, environs of Satipo Town, ~800 m, forest near waterfall, at light, 4–6 Nov. 2008, A. Gorochov, M. Berezin, L. Anisyutkin, E. Tkatsheva, V. Izersky (ZIN).

**Description.** Male (holotype). Colouration of body light brown with following marks: antennal flagellum with sparse small brown spots; pronotal disc with a pair of slightly darkened anterolateral spots; tegmina almost transparent but with yellowish tinge, distinct grayish brown spot at base of dorsal field, and rest of venation from yellowish to light brown (Fig. IV: 3); metanotum almost light brown with middle part brown; dorsum of abdominal tergites and anal plate grayish brown; all sternites and genital plate yellowish. Structure of body similar to that of *D. decora*, but lateral lobes of pronotum slightly lower, metanotum with fold almost as in *D. decora decora* and three characteristic projections behind this fold (Fig. III: 5), tegmina with slightly wider mirror and shorter apical area (Fig. IV: 3), tegminal *Sc* comb with 9–10 branches, hind basitarsus with four outer and one inner denticles, abdomen without process and/or distinct convexity on proximal tergites, anal plate with apex widely truncate and a pair of lateral convexities dorsally, genital plate practically as in holotype of *D. decora decora*, and genitalia distinguished from those of *D. decora* by following charac-





**Figs V (1–18).** *Diatrypa*, male: 1–4, *D. decora decora* subsp. nov.; 5–8, *D. signata* sp. nov.; 9–12, *D. diluta* sp. nov.; 13–17, *D. atrata* sp. nov.; 18, *D. ?diluta* from Peru determined by Chopard as *D. pallidilabris*. Genitalia from above (1, 5, 9, 13), from below (2, 6, 10, 14, 18), and from side (3, 7, 11, 15); posterior edge of anterior (widened) part of epiphallus from above (4, 8, 12, 16); posterior (narrowed) part of epiphallus with guiding rod (guiding rod outlined by interrupted line) from side (17). [18, after Chopard (1956)].



ters: posterior (narrower) part of epiphallus somewhat longer and basally narrower, and with posterodorsal lobes wider in profile; anterior (widened) epiphallic part clearly lower, with upper angular projections longer and without invaginations under them (Figs V: 5–8).

Variations. Pronotum often completely light brown; hind tibia sometimes with distinct brown dot on dorsal surface near base.

Female unknown.

Length in mm. Body 9–10; body with wings 14–15; pronotum 1.5–1.8; tegmina 10–11; hind femora 6–6.8.

*Comparison.* The new subspecies differs from *D. pallidilabris* and *D. decora* in the uniformly light head and small characters of tegminal stridulatory apparatus. From *D. decora*, it is additionally distinguished by the characters of male genitalia listed in the description of *D. signata*, and from the specimen from Nicaragua (Otte & Perez-Gelabert, 2009: fig. 440, G), in the apical part of epiphallus clearly rounded in the profile. From *D. nicaragua*, the new species differs in the posterior (narrowed) part of epiphallus much longer; from *D. tolteca* and *D. jansoni*, in the male tegmina with a longer or narrower mirror and with a longer apical area; and from all the other congeners, in the same characters as *D. decora* (except colouration) combined with a characteristic colouration of body: more or less uniform but with a dark mark at the base of tegmina.

*Etymology.* This name is the Latin word “*signata*” (clear, distinct).

***Diatrypa (Diatrypa) diluta* sp. nov.**

(Figs III: 6, 7; IV: 4; V: 9–12)

*Holotype.* Male; **Peru**, Junin Department, Satipo Prov., ~25 km SE of Satipo Town, environs of Rio Venado Vill., ~1200 m, partly primary / partly secondary forest, at light, 20–23 Oct. 2008, A. Gorochov, M. Berezin, L. Anisyutkin, E. Tkatsheva, V. Izersky (ZIN).

*Paratypes.* Two males, same data as for holotype; 2 males, same country, Ucayali Department, Atalaya Prov., Atalaya Town on Rio Ucayali, ~200 m, at light in hotel, 25–26 Nov. 2008, A. Gorochov (ZIN).

*Description.* Male (holotype). Colouration of body light brown with following marks: head dorsum and most part of pronotum (except for lower area of lateral lobes) slightly darker, intermediate between brown and light brown; antennal flagellum with darkish spots almost as in *D. signata* but very sparse and weakly distinct; tegmina with dorsal field uniformly light (almost transparent, with yellowish tinge and venation from yellowish to light brown) and lateral field as in *D. signata* (Fig. IV: 4); dorsum of metanotum and of abdomen (including anal plate) grayish brown; all pleurites and all sternites as well as genital plate yellowish. Structure of body similar to that of *D. signata*, but metanotum almost without lateral projections behind transverse fold and with median projection divided by deep and narrow groove into two convexities (Fig. III: 6), tegminal mirror almost as in *D. decora*, tegminal apical area intermediate between those of *D. decora* and *D. signata* (Fig. IV: 4), tegminal *Sc* comb with 8–9 branches, first tergite of abdomen with a pair of small convexities on median part, second abdominal tergite with a pair of low lobules on anteromedian part and with rather long hairs on rest of dorsum of this tergite (Fig. III: 7), anal plate with wide and very short apical notch, and genitalia with following characters: posterior (narrowed) part of epiphallus much shorter and with posterodorsal lobes moderately wide and directed upwards (apex of these lobes almost reaching dorsal edge of anterior epiphallic part); anterior (widened) epiphallic part higher (almost as in *D. decora*) and without distinct projections on upper 2/3 of this part (Figs V: 9–12).

Variations. Head dorsum and pronotum sometimes uniformly light brown; antennal flagellum and palpi often yellowish; upper half of lateral pronotal lobes sometimes almost brown; metanotum and abdominal apex (including anal plate) sometimes almost light brown; cerci sometimes yellowish; apical part of epiphallus in males from Atalaya Town slightly narrower.

Female unknown.

Length in mm. Body 8.5–10.5; body with wings 13–15; pronotum 1.5–1.7; tegmina 9–10; hind femora 5.5–6.

**Comparison.** The new species is most similar to *D. nicaragua* in the shape of male genitalia, but distinguished by the posteroventral projections of epiphallus clearly shorter (weakly distinct) in profile and posterodorsal epiphallic lobes distinctly higher. From all the other possible and true species of this subgenus, *D. diluta* differs in the same characters as *D. signata* in combination with the body colouration more or less uniformly light and posterodorsal epiphallic lobes directed only upwards (not mainly or partly forwards).

**Etymology.** The species name is the Latin word “*diluta*” (light).

**Remarks.** The specimens from Pucallpa and Tingo Maria (Peru) identified by Chopard (1956) as *D. pallidilabris* may belong to this new species, since one of them has male genitalia very similar to those of *D. diluta* (for comparison see Figs V: 9, 10, 18).

***Diatrypa (Diatrypa) atrata* sp. nov.**

(Figs III: 8; IV: 5; V: 13–17)

**Holotype.** Male; **Ecuador**, eastern part, ~75 km SEE of Quito City, environs of El Chaco Vill. on Rio Quijos, 1500 m, secondary forest, on leaf of small tree, at night, 18–22 Nov. 2005, A. Gorochov, A. Ovtshinnikov (ZIN).

**Description.** Male (holotype). Colouration of body grayish brown with lower half of head, pronotal lateral lobes, fore and middle femora, proximal half of hind femora, and distal part of hind tibiae almost dark brown, with antennal flagellum light brown and having sparse and small darkish spots, with stridulatory areas of lower tegmen very weakly darkened and semitransparent, with distal part of fore and middle tibiae almost light brown, with middle part of hind basitarsus yellowish, with cerci light brown, and with sternites and genital plate from light brown to yellowish. Structure of body similar to that of *D. decora* but distinguished by following characters: scape almost 1.5

times as wide as rostrum between antennal cavities; metanotum with rather deep transverse fold on dorsum near its middle, with very narrow median projection near this fold, and with anteromedian area having numerous hairs (Fig. III: 8); tegmina with 5–6 oblique veins, stridulatory vein almost transverse, mirror having two dividing veins and distinctly wider cell near distal edge of mirror (this mirror approximately 1.5 times as long as wide in lower tegmen and incomplete in upper tegmen), Sc comb having 10–11 branches, and apical area distinctly longer (Fig. IV: 5); hind basitarsus with four outer and one inner denticles; proximal abdominal tergites without distinct process and/or convexity; apex of anal plate clearly rounded; apex of genital plate roundly angular; genitalia as in *D. diluta*, but posterior (narrowed) part of epiphallus slightly longer and not narrowed basally, posterodorsal epiphallic lobes distinctly lower (shorter), posteroventral epiphallic projections slightly longer and distinctly curved medially, and endoparameral apodemes somewhat shorter (Figs V: 13–17).

Female unknown.

Length in mm. Body 9.2; body with wings 15.5; pronotum 1.7; tegmina 11; hind femora 6.7.

**Comparison.** The new species is most similar to *D. diluta* in the shape of male genitalia but distinguished by a darker colouration and the above-listed (in the description of *D. atrata*) characters of male genitalia. From all the other congeners, the new species differs in the same characters as *D. decora* but has almost uniformly dark body colouration combined with the posterior (narrowed) part of epiphallus shorter or longer.

**Etymology.** The species name is the Latin word “*atrata*” (darkened).

***Diatrypa (Diatrypa) ?tolteca***

Saussure, 1874

**Material examined.** **Mexico:** 5 females, Veracruz State, 15–20 km NE of Catemaco Town, Los Tuxtlas (biostation of Mexico University), 2 km

from sea coast, rainforest on hills, at light, 6–17 Nov. 2006, coll. A. Gorochov, A. Ovtshinnikov (ZIN); 3 females, Chiapas State, environs of Tuxtla Gutierrez City, biostation Laguna Belgica near El Ocote Reserve, 600–1000 m, primary forest, at light, 19–24 May 2006, coll. A. Gorochov, M. Berezin (ZIN); 1 female, same state, 130 km WN of Tapachula Town, environs of Ejido Las Golondrinus Vill. near El Triunfo Reserve, 800–1000 m, secondary forest, at light, 13–17 May 2006, coll. A. Gorochov, M. Berezin (ZIN).

**Notes.** These females correspond to the original description and the author's redescription (Saussure, 1874, 1897). However, the absence of males does not allow me to give a more exact identification. Saussure (in the same publications) recorded *D. tolteca* from Cordova (type locality) and Tabasco. My specimens also suppose a rather wide distribution of this species in the southern part of Mexico. They are characterized by the following features: body size is rather small; colouration light brown with hardly darker clypeus and labrum, slightly darker most part of dorsal surfaces of fore and middle tibiae, distinctly darker (brown) lateral pronotal lobes and longitudinal ventral keels of fore femora, a grayish brown dorsal part of hind tibiae, and some yellowish areas (ventral part of thorax and of abdomen, coxae, apical parts of fore and middle tibiae, areas on fore and middle tarsi, most part of hind basitarsus, and sometimes cerci or their basal parts); rostrum between antennal cavities is almost equal to the scape in width; pronotum is rather low, almost 1.3 times as wide as long, slightly narrowing to the head, and with a roundly angular hind edge; tegmina long, reaching base of middle third of hind tibia, with the dorsal field having 6–7 longitudinal veins and 2–3 branches of *Cu* comb, and with the lateral field having 4–5 branches of *Sc* comb; hind wings distinctly longer than tegmina, reaching distal quarter of hind tibia; abdominal apex very similar to that of female of *D. decora morona* but with ovipositor hardly shorter (hind femur approximately 1.1 times as long as ovipositor). These females have slight differences in colouration: the specimens

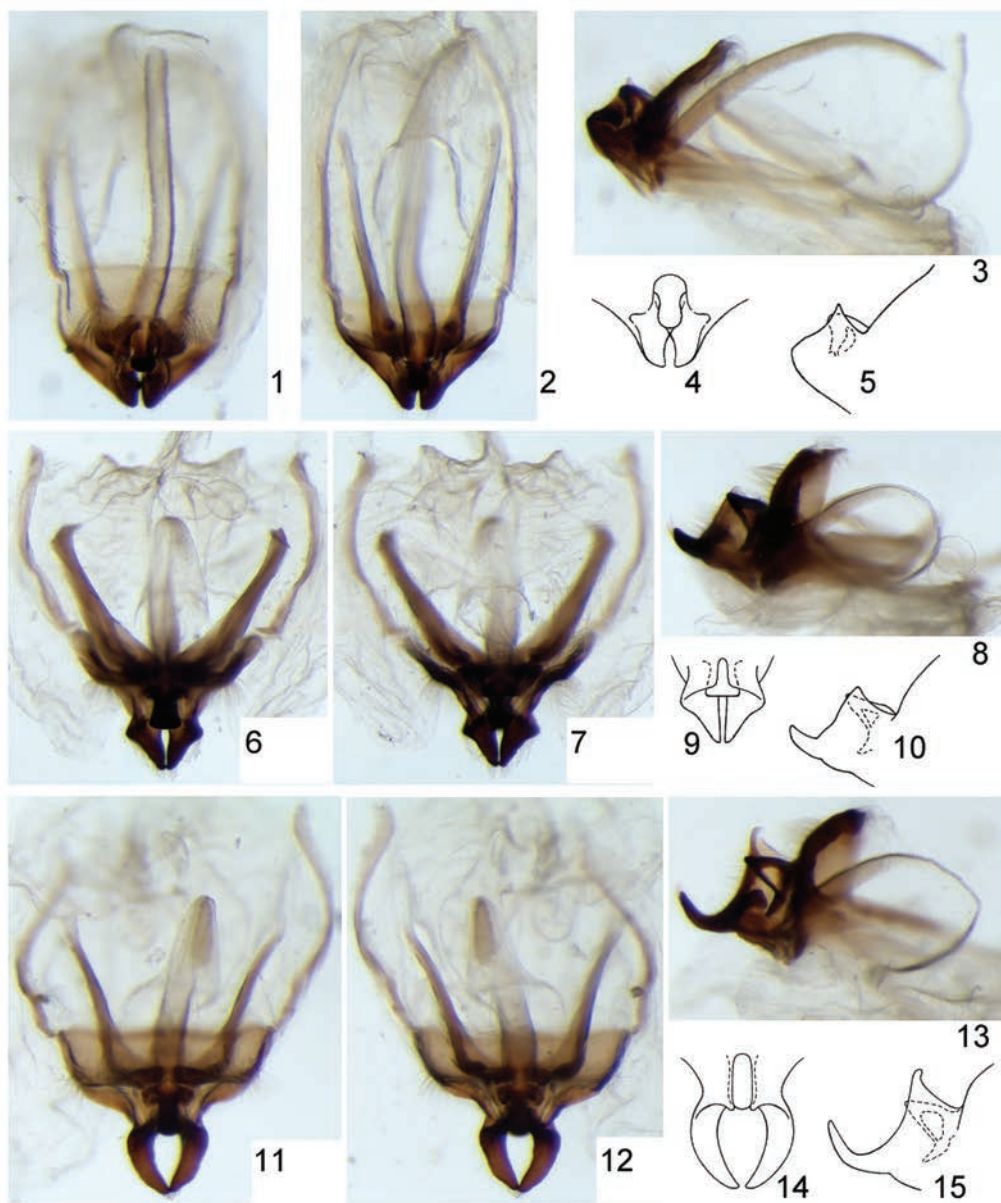
from Veracruz are slightly darker and with a less distinct light apical area of middle tibia and darkish keels of fore femora; the latter female is distinguished from them by these keels darkened in the distal half of femora only. These specimens may belong to two or three different subspecies.

**Measurements.** Length of females examined in mm: body length 8–9.5; body with wings 14–15; pronotum 1.8–2; tegmina 9.2–10; hind femora 6–6.5; ovipositor 5.5–5.8.

***Diatrypa (Latispeculum) satipo* sp. nov.**  
(Figs III: 9; IV: 6; VI: 1–5)

**Holotype.** Male; **Peru**, Junin Department, Satipo Prov., environs of Satipo Town, ~800 m, forest near waterfall, at light, 4–6 Nov. 2008, A. Gorochov, M. Berezin, L. Anisyutkin, E. Tkatsheva, V. Izersky (ZIN).

**Description.** Male (holotype). Colouration of body light brown with following marks: a pair of small and weakly distinct stripes on head along dorsal edges of antennal cavities, sparse small spots on antennal flagellum, apical part of fifth segment of maxillary palpi, numerous dots on pronotum and femora, a few small spots on dorsal surface of middle and hind tibiae, and exposed part of hind wings darkish (grayish brown); stridulatory areas semitransparent in upper tegmen and almost completely transparent in lower tegmen; abdominal tergites (excluding anal plate) more or less grayish brown; sternites, genital plate and cerci yellowish. Structure of body weakly similar to *D. decora*, however with following differences: scape 1.4 times as wide as rostrum between antennal cavities; pronotum distinctly narrowing towards head, with disc about 1.4 times as wide as long, and with lateral lobes somewhat lower; metanotum with proximal transverse fold distinct but not deep, with large and also shallow concavity behind it, and with a pair of high and almost triangular convexities at middle of this concavity (Fig. III: 9); tegmina reaching approximately middle of hind tibiae, with dorsal field much wider and having 7–8 oblique veins, with stridu-



**Figs VI (1–15).** *Diatrypa*, male: 1–5, *D. satipo* sp. nov.; 6–10, *D. chaco* sp. nov.; 11–15, *D. coca* sp. nov. Genitalia from above (1, 6, 11), from below (2, 7, 12), and from side (3, 8, 13); posterior (narrowed) part of epiphallus with guiding rod from above (4, 9, 14) and from side (5, 10, 15)..

latory vein long and transverse, with mirror very transverse, with chords more strongly curved, with apical area somewhat longer and having longitudinal branches more strongly curved, and with *Sc* comb having 12–13 branches (Fig. IV: 6); hind basitar-

sus with four outer and one inner denticles; abdominal tergites without any distinct specializations; anal plate almost triangular and with rounded apex; genital plate hardly notched at apex; genitalia more or less similar to those of *D. atrata* but with pos-



terodorsal lobes of epiphallus much smaller, posteroventral epiphallic projections not curved medially and situated much closer to each other, and spermatophore sac larger (Figs VI: 1–5).

Female unknown.

Length in mm. Body 9.2; body with wings 16; pronotum 2.1; tegmina 11; hind femora 7.

**Comparison.** The new species is similar to *D. championi*, *D. brunnea*, *D. pipizon*, *D. optivus*, *D. eudoxos*, *D. choristos*, *D. bellulus* and *D. ennychios* in the structure of male tegmen (especially by the shape of mirror), but it differs from *D. championi* in the male tegmina reaching the middle of hind tibiae (*vs.* proximal part of hind tibiae) and diagonal vein almost as long as mirror (*vs.* clearly shorter than mirror); from *D. brunnea*, in all the pronotal parts of the same colouration and some longitudinal branches in the apical area of male tegmina more strongly curved; from *D. pipizon*, in the apical area of male tegmina not shorter than mirror and epiphallus with much shorter posteroventral projections; from *D. optivus* and *D. eudoxos*, in the head and pronotum without dark stripes under the rostral apex and without large dark areas on the pronotal lateral lobes; from *D. choristos* and *D. bellulus*, in the posterolateral lobes of epiphallus much shorter; and from *D. ennychios*, in the notch between the posteroventral projections of epiphallus distinctly narrower. From all the other congeners with males described, the new species differs in the male tegmina having the mirror clearly wider or apical area distinctly longer, and from the rest of congeners, in the body colouration light with only small spots and numerous dots darkish, and/or in the tegmina and hind wings clearly longer.

**Etymology.** The species is named after Satipo Town.

***Diatrypa (Latispeculum) chaco* sp. nov.**  
(Figs III: 10; VI: 6–10; VII: 1)

**Holotype.** Male; Ecuador, ~75 km SEE of Quito City, environs of El Chaco Vill. on Rio

Quijos, ~1500 m, secondary forest, on leaf of bush, at night, 18–22 Nov. 2005, A. Gorochov, A. Ovtshinnikov (ZIN).

**Paratypes.** Two females, same data as for holotype (ZIN).

**Description.** Male (holotype). Colouration of body yellowish with following pattern: dorsum of head light brown with grayish tinge, grayish brown both line on epicranium along (near) upper edge of each antennal cavity and stripe on upper part of membrane of each antennal cavity, slightly less dark both area between antennal cavities under rostral apex and area behind each eye, and small weakly distinct darkish marks in middle part of dorsum; antennae with scape almost light brown and flagellum having small sparse darkish spots; pronotum light brown with upper half of lateral lobes grayish brown and disc having weakly distinct darkish areas; stridulatory areas semitransparent in upper tegmen and almost completely transparent in lower tegmen; venation in basal and apical tegminal areas as well as chords from light brown to brown; area between medial chords light brown; colouration of legs approximately as in *D. satipo*; abdominal tergites with numerous small grayish brown spots; anal plate with a few marks of same color. Structure of body more or less similar to that of *D. decora* but distinguished by following characters: scape about 1.1 times as wide as rostrum between antennal cavities; pronotum slightly narrowing towards head and with lateral lobes somewhat lower; metanotum with rather large but not deep concavity in anterior half, with a pair of semiglobular convexities in middle part of this concavity, and almost without anterior fold (Fig. III: 10); tegmina reaching apex of hind femora, with dorsal field wider (but narrower than in *D. satipo*) and having 5–6 oblique veins, with mirror as long as wide, with stridulatory vein rather long and transverse, with chords intermediate between those of *D. decora* and *D. satipo*, with apical area distinctly shortened and having longitudinal branches more strongly curved, and with *Sc*

comb having 10–12 branches (Fig. VII: 1); hind wings reaching apex of tegmina; hind basitarsus, abdominal tergites, and genital plate practically as in *D. satipo*; genitalia somewhat similar to those of *D. satipo* but having spermatophore sac smaller, posteroventral projections of epiphallus much longer and comparatively thin in profile, and bases of these projections distinctly widened (Figs VI: 6–10).

Female. General appearance as in male, but colouration less spotted (in one female, head with darkened line along upper edge of antennal cavities weakly distinct and with dark stripe developed only on membrane around right scape, pronotum with upper half of lateral lobes clearly less darkened, and dorsal tegminal field light brown with slightly darker venation; in other female, head, pronotum, dorsal tegminal field, and fore and middle legs almost completely light, from light brown to yellowish), and structure of some bodyparts (pronotum, abdomen) as well as venation of tegmina almost as in female of *D. decora morona* but with following differences: *Cu* comb of tegmina with 3–4 branches (these branches situated in distal part of dorsal field), rest of longitudinal venation of tegminal dorsal field with distal veins (situated in subdistal part of this field) slightly oblique, *Sc* comb of tegmina with 7–8 branches, ovipositor slightly longer than hind femur.

Length in mm. Body: male 11, female 9–10; body with wings: male 12.7, female 12–12.5; pronotum: male 2.4, female 2.4–2.6; tegmina: male 9, female 8.5–8.8; hind femora: male 7.5, female 7.4–7.7; ovipositor 7.8–8.2.

**Comparison.** The new species differs from *D. satipo* in distinctly shorter wings and in the above-mentioned characters of male genitalia. From the congeners having the apical area of male tegmina shortened, it is distinguished by the posteroventral projections of epiphallus clearly longer (from *D. allardi*) and apical parts of these projections situated very close to each other (from *D. latipennis*). From the rest of congeners, *D.*

*chaco* differs in the apical area of male tegmina distinctly shortened in combination with the tegminal mirror as long as wide, colouration almost uniformly light, hind wings practically not exposed behind tegmina, and ovipositor slightly longer than hind femur.

**Etymology.** The species is named after El Chaco Village.

***Diatrypa (Latispeculum) coca* sp. nov.**  
(Figs VI: 11–15; VII: 2)

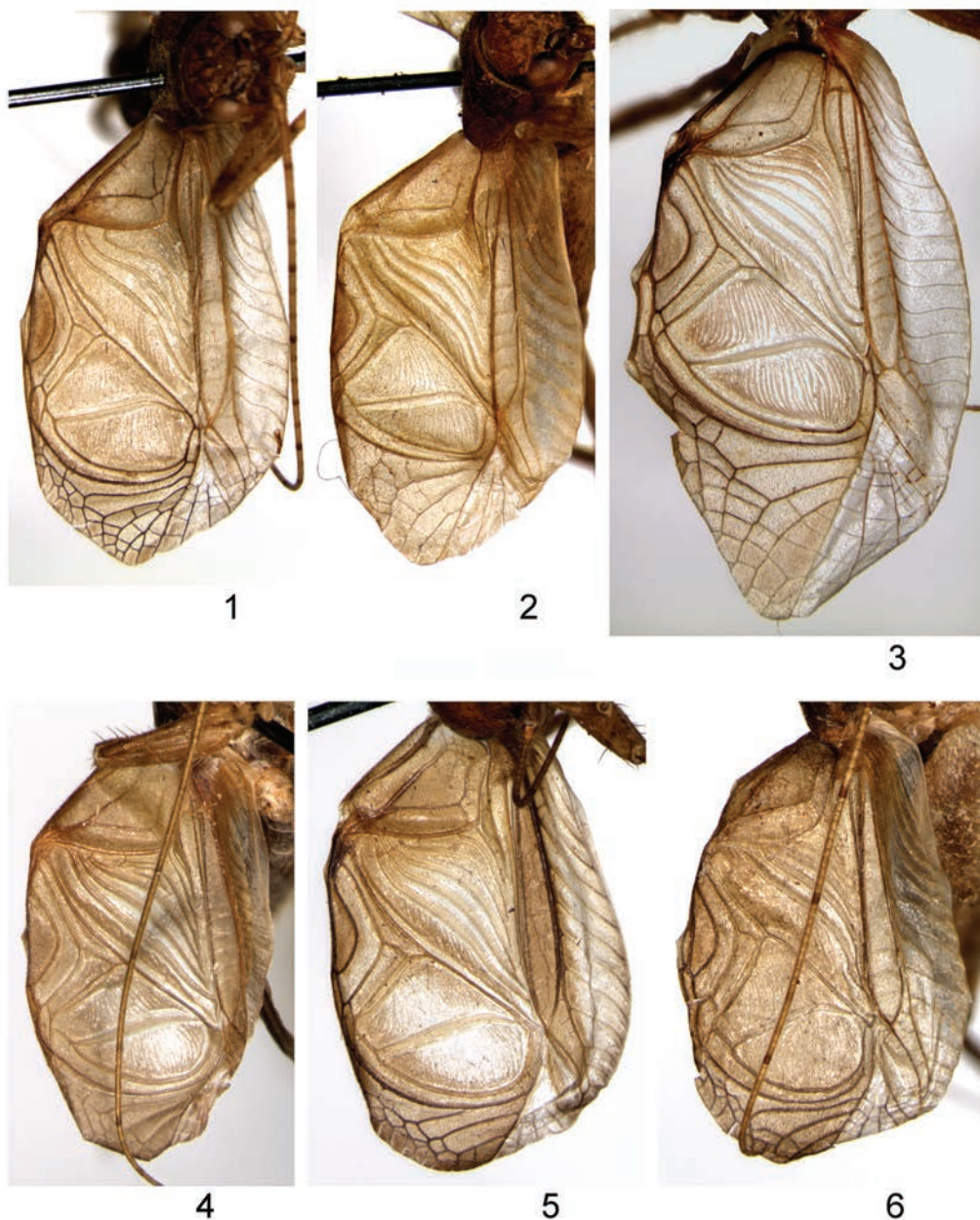
**Holotype.** Male; Ecuador, ~95 km E of Quito City, environs of San Rafael Waterfall on Rio Coca, ~1300 m, primary forest, between died leaves situated on branch of small tree, at night, 23–26 Nov. 2005, A. Gorochov, A. Ovtshinnikov (ZIN).

**Description.** Male (holotype). Colouration and structure of body very similar to those of holotype of *D. chaco* but distinguished by following characters: head rostrum between antennal cavities under rostral apex with only a pair of small lateral grayish brown spots; epicranium behind eyes and on dorsum without darkened marks; pronotum light brown with lower half of lateral lobes yellowish; tegminal venation almost completely yellowish; fore and middle legs with darkish dots and small spots sparser and less distinct; abdominal tergites and anal plate with less dark spots; metanotum with semiglobular convexities slightly larger; tegmina with somewhat shorter mirror (its hind part almost obliquely truncate), and with apical area less strongly shortened (Fig. VII: 2); apex of anal plate roundly truncate; genitalia with posterodorsal lobes of epiphallus higher (longer), with posteroventral epiphallic projections distinctly longer and arcuate, and with spermatophore sac somewhat larger (but distinctly smaller than in *D. satipo*; Figs VI: 11–15).

Female unknown.

Length in mm. Body 9.7; body with wings 12.8; pronotum 2.3; tegmina 9; hind femora 7.5.

**Comparison.** The new species differs from *D. chaco* in the characters listed above,



**Figs VII (1–6).** *Diatrypa*, right tegmen of male: 1, *D. chaco* sp. nov.; 2, *D. coca* sp. nov.; 3, *D. venado* sp. nov.; 4, *D. brevis* sp. nov.; 5, *D. aguarico* sp. nov.; 6, *D. angulata* sp. nov.

and from all the other congeners, in the same characters as *D. chaco* (excluding the length of ovipositor which is unknown).

**Etymology.** The species is named after the Coca River.

***Diatrypa (Latispeculum) venado* sp. nov.** (Figs III: 11; VII: 3; X: 1–5)

**Holotype.** Male; **Peru**, Junin Department, Satipo Prov., ~25 km SE of Satipo Town, environs of Rio Venado Vill., ~1200 m, partly primary



/partly secondary forest, on leaf of bush, at night, 20–23 Oct. 2008, A. Gorochov, M. Berezin, L. Anisyutkin, E. Tkatsheva, V. Izersky (ZIN).

**Description.** Male (holotype). Colouration of body yellowish with following pattern: epicranium rose with light brown dorsum above rostral apex, with distinct brown line along upper edge of each antennal cavity, and with weakly distinct grayish brown spots on dorsum and behind eyes; antennal flagellum with small sparse and almost indistinct darkish spots; pronotal disc light brown with slightly darker lateral parts; tegmina almost transparent but with narrow brown stripe along both basal edge and proximal third of medial edge, with chords and some veins in basal and apical areas light brown, and with *Sc* stock, *R* and *M* yellow; middle and hind legs with sparse small light brown and brown spots on femora and tibiae; abdominal tergites light brown in dorsal part. External structure of body similar to that of *D. satipo*, but scape almost twice as wide as rostrum between antennal cavities, pronotum 1.3 times as wide as long, metanotum behind paired triangular convexities slightly more convex (this unpaired convexity looking almost as additional transverse fold; Fig. III: 11), lateral half of tegminal stridulatory vein slightly oblique, dorsal tegminal field with 8–9 oblique veins and with longitudinal branches in apical area somewhat less strongly curved, lateral tegminal field with *Sc* comb having 15–16 branches (Fig. VII: 3). Genitalia similar to those of *D. chaco* and *D. coca* but with posterodorsal epiphallal lobes widely rounded, with posteroventral epiphallal projections longer and more strongly curved upwards, and with spermatophore sac intermediate in size between that in the two latter species and that in *D. satipo* (Figs X: 1–5).

Female unknown.

Length in mm. Body 9.5; body with wings 17; pronotum 2.3; tegmina 13; hind femora 7.5.

**Comparison.** The new species is distinguished from all the species, having a distinctly transverse tegminal mirror and

listed in the *D. satipo* comparison, by the following characters: from *D. brunnea* (very similar to *D. venado* in colouration), by the pronotum shorter, and mirror slightly wider and with medial and posterolateral corners clearly more projected; from *D. championi*, by a distinctly wider mirror; and from the rest of these species, by the posteroventral epiphallal projections thinner, longer and more strongly curved. From the other congeners, it differs in the same characters as *D. satipo*.

**Etymology.** The species is named after Rio Venado Village.

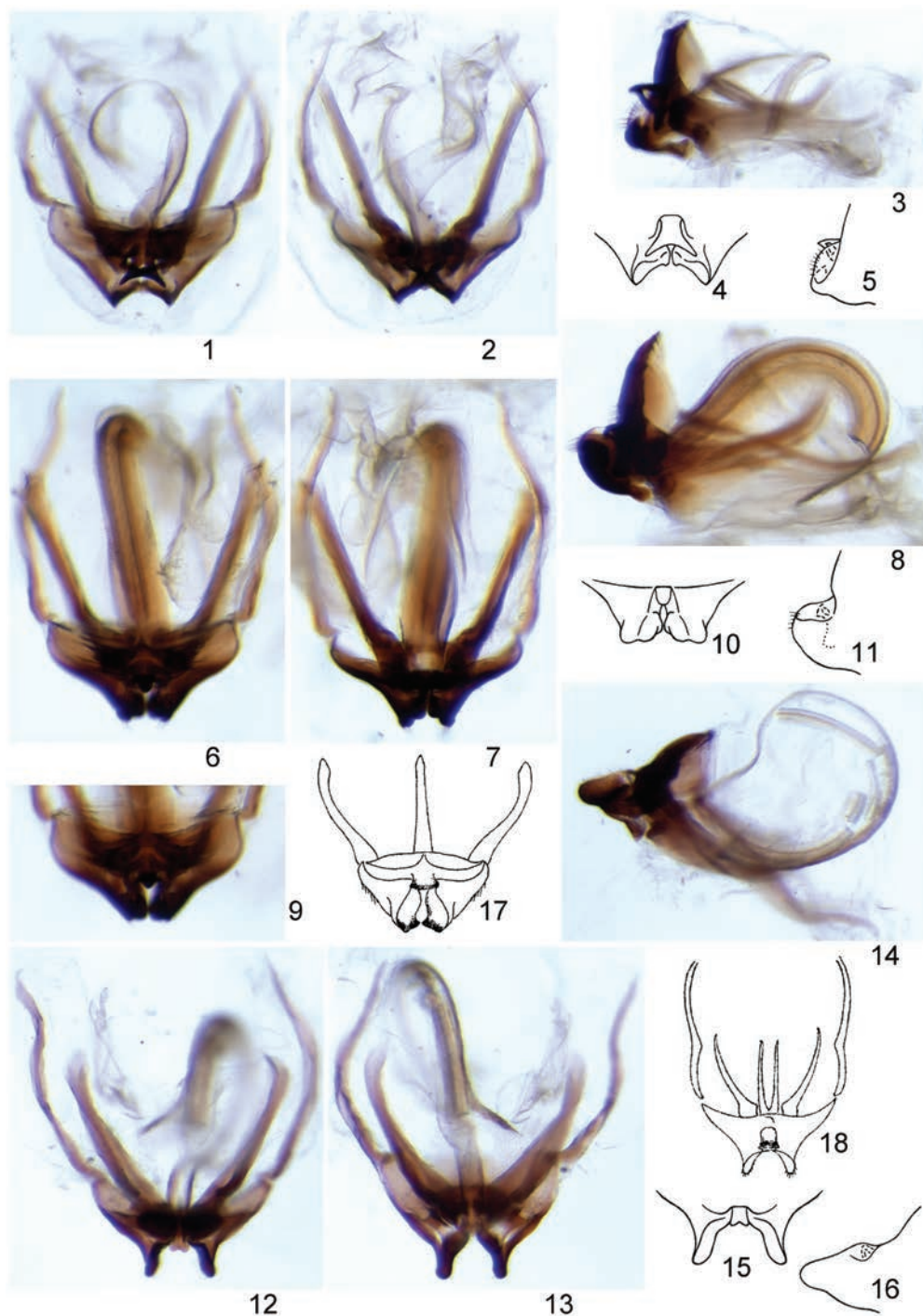
***Diatrypa (Latispeculum) brevis* sp. nov.**  
(Figs III: 12; VII: 4; VIII: 1–5)

**Holotype.** Male; **Peru**, bank of Rio Morona approximately at middle of distance between mouth of this river and its Ecuadorian part, 200–300 m, primary forest, on leaf of small tree, at night, 24–27 Jan. 2010, A. Gorochov (ZIN).

**Paratype.** Female, same data as for holotype (ZIN).

**Description.** Male (holotype). Colouration of body light brown with grayish tinge, two pairs of small brown stripes on head (along upper edges of antennal cavities and in upper part of membranes around scapes), darkish area on epicranium behind each eye, mouthparts and antennal flagellum yellowish but with small sparse darkish spots on flagellum, pronotal lateral lobes grayish brown, stridulatory areas semitransparent in upper tegmen and almost transparent in lower tegmen, tegminal venation from light brown to yellowish, exposed part of hind wings grayish, legs having darkish dorsal spot on middle tibiae near apex and darkish spots on dorsal part of hind tibiae as well as darkish reticular ornament on outer and dorsal surfaces of proximal two thirds of hind femora, dorsum of abdomen (including anal plate) grayish brown, and all sternites and genital plate as well as distal half of cerci weakly darkened. Structure of body similar to that of *D. chaco*, but metanotum with anterior fold higher and with middle part of concavity behind this fold





**Figs VIII (1–16).** *Diatrypa*, male: 1–5, *D. brevis* sp. nov.; 6–11, *D. aguarico* sp. nov.; 12–16, *D. angulata* sp. nov.; 17, *D. allardi*; 18, *D. latipennis*. Genitalia from above (1, 6, 12, 17, 18), from below (2, 7, 13), and from side (3, 8, 14); posterior (narrowed) part of epiphallus with guiding rod from above (4, 10, 15) and from side (5, 11, 16); posterior half of genitalia from above and slightly behind (9). [17, 18, after Chopra (1956)].

having large unpaired median convexity (this convexity rather high, its apex with large concavity possibly formed as result of deformation in dry specimen; Fig. III: 12), tegmina with 6–7 oblique veins and with mirror slightly more transverse (Fig. VII: 4), hind wings slightly exposed behind tegmina, apex of anal plate truncate, apex of genital plate rounded, and genitalia more or less similar to those of *D. satipo* but distinguished by following characters: epiphallus wider, shorter, and having much wider notch between posterolateral parts (Figs VIII: 1, 2); posterodorsal epiphallic lobes almost indistinct (semimembranous and widely rounded in profile; Figs VIII: 3, 5); distal part of guiding rod much wider and bifurcate (Figs VIII: 1, 4).

Female. General appearance similar to that of male, but maxillary palpi with distinct darkish spot on fifth segment near its apex, tegmina darker (grayish brown with venation in proximal part of dorsal field light brown), hind tibiae with a few small darkish spots dorsally, sternites yellowish, dorsal tegminal field with 6 longitudinal branches (distal branches slightly irregular and oblique) and sparse crossveins as well as with distal part of *Cu* comb having 2–3 branches, lateral tegminal field with *Sc* comb having 5–6 branches (these branches situated obliquely but more longitudinally than in male), and abdomen almost as in female of *D. decora morona* but with distinctly shorter ovipositor.

Length in mm. Body: male 8.5, female 7; body with wings: male 9.5, female 9.2; pronotum: male 1.9, female 2.2; tegmina: male 7, female 6.2; hind femora: male 6.3, female 6.5; ovipositor 4.8.

**Comparison.** The new species is distinguished from the congeners with a shortened apical area of male tegmina in the following characters: guiding rod of male genitalia distinctly bifurcate at apex (from *D. allardi*, *D. chaco* and *D. coca*); posterolateral parts of epiphallus clearly shorter, and endoparameral apodemes distinctly longer (from *D. latipennis*); posterodorsal lobes of

epiphallus widely rounded in profile as well as posteroventral epiphallic projections much shorter (additionally from *D. chaco* and *D. coca*). From the rest of congeners, *D. brevis* differs in the apical area of male tegmina distinctly shortened in combination with the tegminal mirror slightly transverse, colouration more or less uniformly light, hind wings almost not exposed behind tegmina, and hind femur about 1.35 times as long as ovipositor.

**Etymology.** This name is the Latin word “*brevis*” (short).

***Diatrypa (Latispeculum) aguarico*  
sp. nov.**

(Figs III: 13; VII: 5; VIII: 6–11)

**Holotype.** Male; **Ecuador**, eastern part, ~70 km SE of Lago Agrio Town, environs of S. Pablo de Kantesiya Vill. on Rio Aguarico, lowlying primary forest, on leaf of bush, at night, 10–17 Nov. 2005, A. Gorochov, A. Ovtshinnikov (ZIN).

**Paratype.** Female, same data as for holotype (ZIN).

**Description.** Male (holotype). Colouration and structure of body similar to those of *D. brevis* but with following differences: dorsal field of tegmina with grayish brown both a pair of veins along anal edge of this field and medial half of vein situated near mirror and parallel to its distal edge; lateral field of tegmina with most part of *Sc* stock and of *R* grayish brown (Fig. VII: 5); reticular ornament of hind femora darker, grayish brown; metanotum with a pair of rather small semiglobular tubercles behind anterior fold (Fig. III: 13); tegmina with 6–7 oblique veins, with diagonal vein somewhat shorter, and with mirror slightly larger (Fig. VII: 5); first and second abdominal tergites with a pair of very small dorsal tubercles near anterior edge of these tergites (Fig. III: 13); genitalia with rather narrow guiding rod having rounded (not bifurcate) apical part, with narrow notch between posterolateral parts of epiphallus, and without distinct posterodorsal epiphallic lobes (Fig. VIII: 6–11).

Female. General appearance as in male, but with following differences: middle femora almost without darkish dorsal spot near apex; tegmina and abdomen similar to those of female of *D. brevis* but distinguished by *Cu* comb with 1–2 branches and *Sc* comb with 4–5 branches as well as by abdominal sternites and genital plate slightly darkened, and hind femur almost 1.4 times as long as ovipositor.

Length in mm. Body: male 10.2, female 7.5; body with wings: male 10.5, female 8.8; pronotum: male 2.1, female 2; tegmina: male 7.6, female 6; hind femora: male 6.9, female 6.6; ovipositor 4.6.

*Comparison.* The differences from *D. brevis* are given above. From *D. allardi* similar to the new species in the shape of male tegmina and of male genitalia, *D. aguarico* differs in the mirror of stridulatory apparatus distinctly more transverse and male genitalia having the guiding rod clearly narrower and not truncate at the apex (for comparison see Figs VIII: 6, 7, 9, 10 and 17). From *D. chaco* and *D. coca* also similar to *D. aguarico* in the male tegmina, it is distinguished by very different male genitalia (see Figs VI: 6–15, VIII: 6–11), and from all the other congeners, by the same characters as *D. brevis*.

*Etymology.* The species is named after the Aguarico River.

### ***Diatrypa (Latispeculum) angulata***

**sp. nov.**

(Figs III: 14; VII: 6; VIII: 12–16)

*Holotype.* Male; **Ecuador**, western part, 10 km E of Agua Blanca Vill. located not far from Puerto Lopez Town, San Sebastian Forest, 700 m, cloud primary forest, between two dry leaves of small tree partly lying on one another, at night, 26–29 Oct. 2005, A. Gorochov, A. Ovtshinnikov (ZIN).

*Paratypes.* Two males, same data as for holotype, but collected on living leaves of small trees (ZIN).

*Description.* Male (holotype). Colouration of body yellowish with grayish tinge, but dorsum of head light brown, head ros-

trum together with lower part of antennal cavities and median space above clypeal suture occupied by large grayish brown area, narrow stripes along dorsal edge of antennal cavities and areas behind eyes also grayish brown, scape and pedicel gray with somewhat darker medial part, antennal flagellum with small and sparse light brown spots, pronotum light brown with grayish brown upper and lower halves of each lateral lobe separated from one another by narrow light longitudinal stripe, legs with very sparse darkish dots and weakly darkened area on distal part of hind femur as well as with a few darkish spots on hind tibia and grayish brown middle part of hind tarsus, tegmina with medial chords and some veins in apical area grayish brown (Fig. VII: 6), most part of andominal tergites and anal plate grayish brown, and four posterior abdominal sternites and genital plate grayish. Body structure similar to that of *D. chaco*, but scape about 1.4 times as wide as rostrum between antennal cavities, central part of metanotum with paired convexities thinner and higher (almost finger-shaped) and a pair of small rounded lobes behind (near) these convexities (Fig. III: 14), tegmina with distinctly more angularly elongate proximal half of mirror and slightly shorter diagonal vein as well as with somewhat shorter apical area (Fig. VII: 6), six anterior abdominal tergites with proximal transverse and carinate fold on each dorsum (anterior fold not wide, median; second fold similar to it but longer and slightly bifurcate; other folds similar to anterior fold but clearly wider; Fig. III: 14), anal plate narrowly notched at apex and with a pair of low longitudinal keels on dorsum, genital plate practically without apical notch, epiphallus with almost horizontal anterior part and long and rather low posterior part lacking any dorsal projections and any apical hooks or spines, and guiding rod of genitalia rather narrow and slightly bifurcate at apex (Figs VIII: 12–16).

*Variations.* Paratypes with basal area of tegminal dorsal field slightly darkened

(light grayish brown); one paratype with scape and pedicel darker than in holotype (grayish brown); other paratype with darkish marks on middle legs and on proximal two-thirds of hind femora more distinct (larger).

Length in mm. Body 7.5–8.5; body with wings 9.5–10.5; pronotum 2–2.2; tegmina 7.3–7.7; hind femora 6.8–7.2.

**Comparison.** The new species is similar to *D. latipennis* in the general shape of male genitalia (Figs VIII: 12, 13, 15, 18) but distinguished from the latter by the mirror of male tegmina almost as long as wide (in *D. latipennis*, this mirror is “strongly transverse”; Chopard, 1956: 280). From all the other congeners, the new species differs in the dark ornament of head and of pronotum in combination with the characteristic shape of tegminal mirror, numerous folds on the male abdominal dorsum, and structure of male genitalia similar to that of *D. latipennis*.

**Etymology.** The species name is the Latin word “*angulata*” (angular).

***Diatrypa (Latispeculum) chamela*  
sp. nov.**

(Figs III: 15; IX: 1; X: 6–9)

**Holotype.** Male; **Mexico**, Jalisco State, environs of biostation of Mexico University near Chamela Vill. (3–4 km from sea coast), dry forest on hill, on leaf of small tree, at night, 23–28 Nov. 2006, A. Gorochov, A. Ovtshinnikov (ZIN).

**Paratype.** One female, same data as for holotype (ZIN).

**Description.** Male (holotype). Colouration of body yellowish with following marks: head with two pairs of short brown lines along dorsal edge of antennal cavities (one pair on upper part of membrane of antennal cavities, other pair on epicranium near dorsal edge of these cavities) and brown line along clypeal suture connected with eyes by oblique brown stripes; pronotum with almost indistinct darkish marks on anterior part of pronotal disc; tegmina semitransparent but with brown transverse band at base of dorsal field and small brownish spot on upper tegmen near plectrum (Fig. IX: 1);

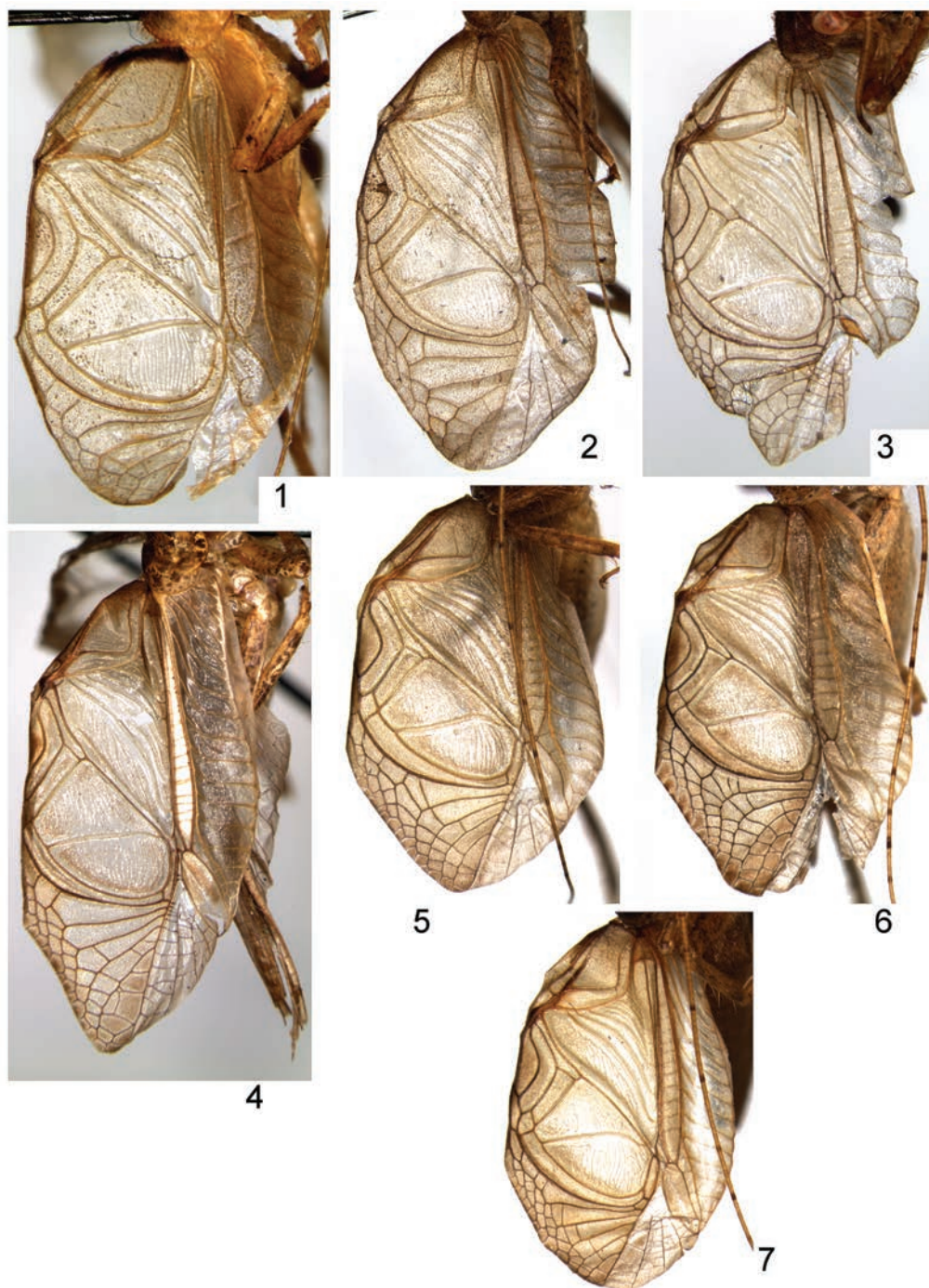
femora with brown line along all ventral keels and a few small brownish spots on inner surface of fore femora, on outer surface of middle femora, and on all surfaces of hind femora; fore tibiae with brownish longitudinal dorsolateral line and small brownish dorsal spot near base of inner tympanum; middle tibiae with a pair of brownish longitudinal dorsal lines; hind tibiae with short dark brown dorsal area near base and longitudinal median line on more distal part of dorsal surface. Structure of body similar to that of *D. chaco*, however scape about 1.5 times as wide as rostrum between antennal cavities, metanotum almost as in *D. brevis* but with median convexity slightly higher and having apical part clearly narrower (Fig. III: 15), tegmina with moderately transverse and slightly less angular mirror as well as with straight diagonal vein and somewhat more curved chords (Fig. IX: 1), anal plate with truncate apex, genital plate almost as in *D. angulata*, genitalia with strongly curved posterior part of epiphallus (in profile) having distinct medial tooth on each lateral lobe and with moderately narrow and somewhat bifurcate guiding rod as well as with small elongate additional lobules near this rod (Figs X: 6–9).

**Female.** General appearance similar to that of male, but head dorsum and pronotum somewhat darker (almost light brown), legs with less distinct marks, tegmina yellowish (not semitransparent) and with hardly darker dorsal field having brown band at base, tegminal structure almost as in female of *D. chaco*, shape of pronotum and structure of abdominal apex similar to those of female of *D. brevis* (but ovipositor somewhat longer).

Length in mm. Body: male 9, female 9.7; body with wings: male 11.5, female 13.8; pronotum: male 2.1, female 2.4; tegmina: male 9.8, female 10; hind femora: male 6, female 7; ovipositor 5.9.

**Comparison.** From *D. venado* also having the posterior epiphallic part strongly curved, the new species is distinguished by the absence of almost rectangular dorsal





**Figs IX (1–7).** *Diatrypa*, right tegmen of male: 1, *D. chamela* sp. nov.; 2, *D. dentata* sp. nov.; 3, *D. borisi* sp. nov.; 4, *D. nikitai* sp. nov.; 5, *D. aequatori* sp. nov.; 6, *D. nebulosa* sp. nov.; 7, *D. robusta* sp. nov.

projection in the basal half of each lateral lobe of posterior epiphallallic part as well as by the presence of a rather large medial tooth on each lateral lobe of this part and the presence of small elongate lobules near the guiding rod. From all the other congeners, the new species differs in the same characters in combination with the posterior part of epiphallus very strongly curved, male tegmina having a moderately transverse mirror and a slightly shortened apical area, as well as in a moderately short ovipositor and a characteristic body colouration (light but with brown lines on the epicranium and a brown band at the base of tegminal dorsal field).

**Etymology.** The species is named after Chamela Village.

***Diatrypa (Latispeculum) dentata*  
sp. nov.**

(Figs III: 16; IX: 2; X: 10–14)

**Holotype.** Male; **Peru**, Junin Department, Satipo Prov., ~25 km SE of Satipo Town, environs of Rio Venado Vill., ~1200 m, partly primary / partly secondary forest, at light, 20–23 Oct. 2008, A. Gorochov, M. Berezin, L. Anisyutkin, E. Tkatsheva, V. Izersky (ZIN).

**Paratype.** One female, same data as for holotype (ZIN).

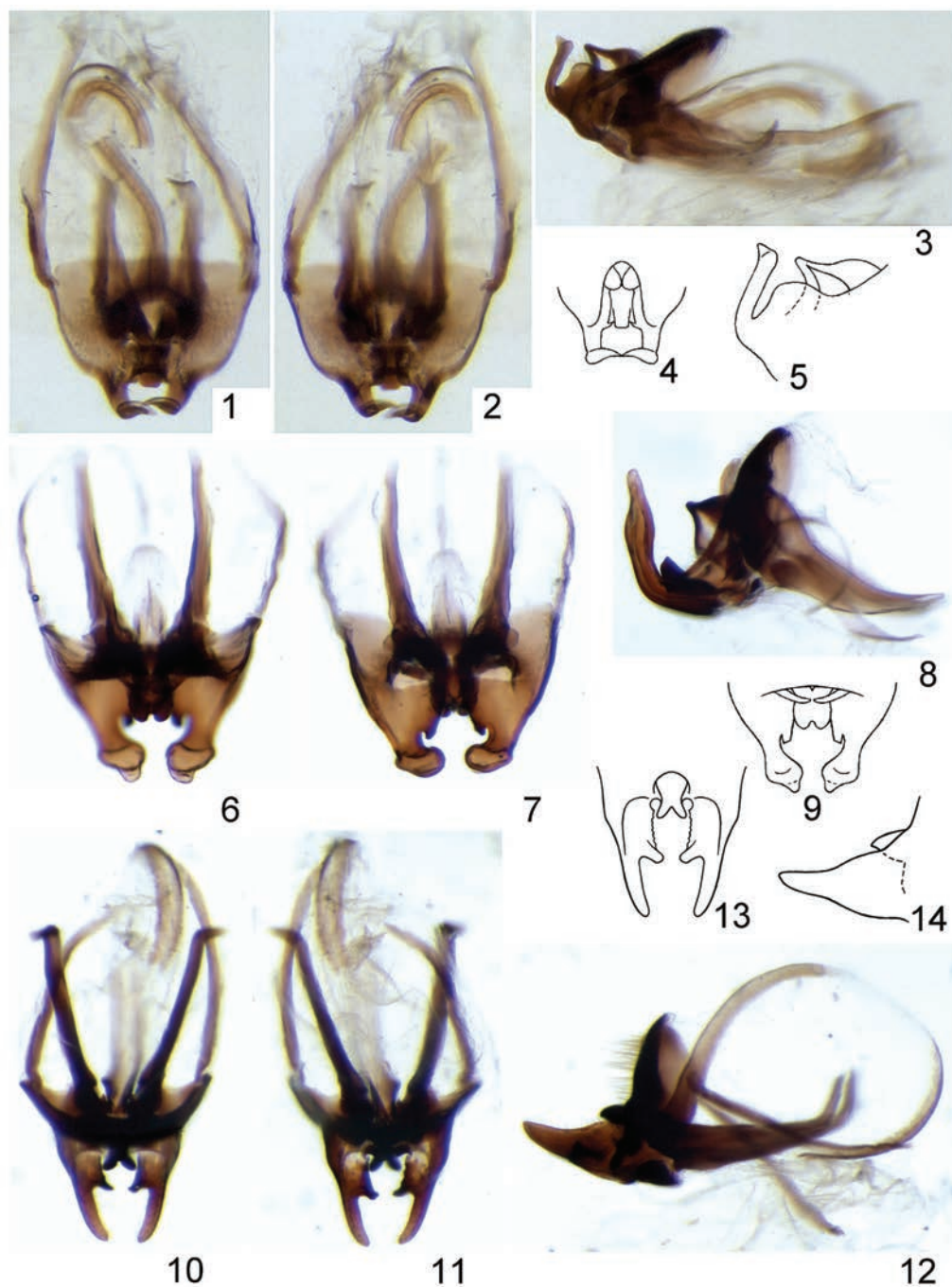
**Description.** Male (holotype). Colouration of body light grayish brown, but upper half of epicranium and pronotum slightly darker (almost grayish brown), narrow areas between lateral ocelli and antennal cavities dark brown, antennae with small sparse brown spots on flagellum, tegmina with yellowish tinge and semitransparent stridulatory areas of lower tegmen, dorsal tegminal field with brown veins along most part of anal edge (but veins along anal edge of apical area less darkened; Fig. IX: 2), distal part of hind wings grayish, legs with small darkish spots on femora and tibiae as well as with brown second segment of fore and middle tarsi, most part of metanotum and anal plate as well as distal half of cerci slightly darkened. Structure of body similar to that of *D. satipo* and *D. venado*, but

scape approximately 1.4 times as wide as rostrum between antennal cavities, metanotum with paired central convexities almost semiglobular (Fig. III: 16), dorsal tegminal field with 6–7 oblique veins, stridulatory vein of upper tegmen similar to that of *D. venado* (less transverse than in *D. satipo*), mirror slightly longer than in *D. satipo* and *D. venado* (Fig. IX: 2), lateral tegminal field with 13–15 branches of *Sc* comb, posterior part of epiphallus with rather low and long posterolateral lobes lacking distinct curvature and dorsal projections or spines as well as having medial tooth (similar to that of *P. chamela*) and medial row of very small denticles on each lobe, guiding rod of genitalia rather narrow but distinctly bifurcate at apex (Figs X: 10–14).

**Female.** General appearance similar to that of male, but antennae with less distinct spots, legs with more distinct spots (especially on tibiae), tarsi with all segments almost not darkened, abdominal sternites hardly darkened, tegmina without semitransparent areas, and structure of both tegmina and abdominal apex almost as in *D. chaco*.

Length in mm. Body: male 10.3, female 9; body with wings: male 18.5, female 16; pronotum: male 2.3, female 2.1; tegmina: male 12.5, female 10.5; hind femora: male 7, female 7; ovipositor 8.

**Comparison.** The new species is similar to *D. satipo* and *D. venado* in the shape of male tegmina (especially by their long apical area), and to *D. chamela*, in the presence of a distinct medial tooth on each lateral lobe of the posterior epiphallallic part. However it differs from *D. satipo* in the less transverse stridulatory vein of upper tegmen; from *D. venado*, in the less transverse mirror of male tegmina, from both these species, in the male genitalia lacking any distinct medial teeth on the lateral lobes of posterior epiphallallic part; and from *D. chamela*, in the male tegmina with a longer apical area and in the male genitalia without strong curvature in profile. From all the other congeners, the new species differs in



**Figs X (1–12).** *Diatrypa*, male: 1–5, *D. venado* sp. nov.; 6–9, *D. chamela* sp. nov.; 10–14, *D. dentata* sp. nov. Genitalia from above (1, 6, 10), from below (2, 7, 11), and from side (3, 8, 12); posterior (narrowed) part of epiphallus with guiding rod from above (4, 9, 13) and from side (5, 14).



a weakly spotted (almost uniform) colouration of body in combination with long wings, a transverse mirror in the male tegmina, a pair of almost semiglobular central convexities on the male metanotum, the absence of any specializations on the proximal abdominal tergites, and the lateral lobes of posterior epiphallallic part almost not curved and with a distinct tooth and very small denticles on the medial edge of each lobe.

**Etymology.** The species name is the Latin word “*dentata*” (toothed).

***Diatrypa (Latispeculum) borisi* sp. nov.**  
(Figs IX: 3; XI: 1–5)

**Holotype.** Male; **Panama**, Panama City, “Parque Natural Metropolitano”, forest canopy, 28 Aug. 1998, B. Korotyaev (ZIN).

**Paratype.** Female; **Panama**, ~15 km NW of Panama City “Parque Nacional Soberania Summit”, 22 Aug. 1998, B. Korotyaev (ZIN).

**Description.** Male (holotype). Colouration of body light brown with hardly darker pronotum, slightly lighter stridulatory areas of tegmina (yellowish in upper tegmen and almost transparent in lower tegmen), brown tegminal *M* and some veins in dorsal tegminal field (near anal edge and in apical area), a few darkish marks on dorsal surface of middle tibiae, small darkish spots on most tergites and at base of spines of hind tibiae, almost brown middle part of hind tarsi, and yellowish rest of hind basitarsi. Structure of body similar to that of *D. satipo*, *D. venado* and *D. dentata*, however rostrum between antennal cavities almost as wide as scape, metanotum with low central convexity and anterior fold (i.e., practically without gland), tegmina almost as in *D. dentata* but with 11–12 branches of *Sc* comb (Fig. IX: 3), anterior part of epiphallus vertical in profile, posterior epiphallallic part also similar to that of *D. dentata* but slightly more curved in profile and with a few small medial tubercles on each lateral lobe (instead of rather large tooth and very small denticles near it), and guiding rod of genitalia very short and not wide as well as with almost truncate apex (Figs XI: 1–5).

Female. General appearance as in male, but pronotum with more or less distinct darkish dots on lateral lobes, dorsal tegminal field light grayish brown, structure of tegmina and of abdominal apex similar to that of *D. chaco* but with ovipositor almost 1.7 times as long as hind femur.

Length in mm. Body: male 11, female 10; body with wings: male 15, female 16; pronotum: male 2.2, female 2.4; tegmina: male 10.2, female 10.3; hind femora: male 7.5, female 8; ovipositor 13.5.

**Comparison.** The new species is most similar to *D. dentata* in the structure of male genitalia but distinguished by the absence of distinct metanotal gland in male and the above-mentioned characters of male genitalia. From *D. championi*, *D. apithoides* and *D. univittata* also described from Panama, the new species differs in the mirror of male tegmina larger (this mirror is almost as long as the apical area; whereas in *D. championi*, it is distinctly shorter than the latter area), hind wings clearly longer than the tegmina (in *D. apithoides*, these wings are not longer than the tegmina), and colouration of hind femora uniform (in *D. univittata*, it is with dark longitudinal stripe); from all the other congeners, the new species differs in the rather uniform colouration in combination with long wings, transverse mirror, slightly oblique stridulatory vein in upper tegmen, absence of distinct gland on the metanotum, characteristic male genitalia, and long ovipositor.

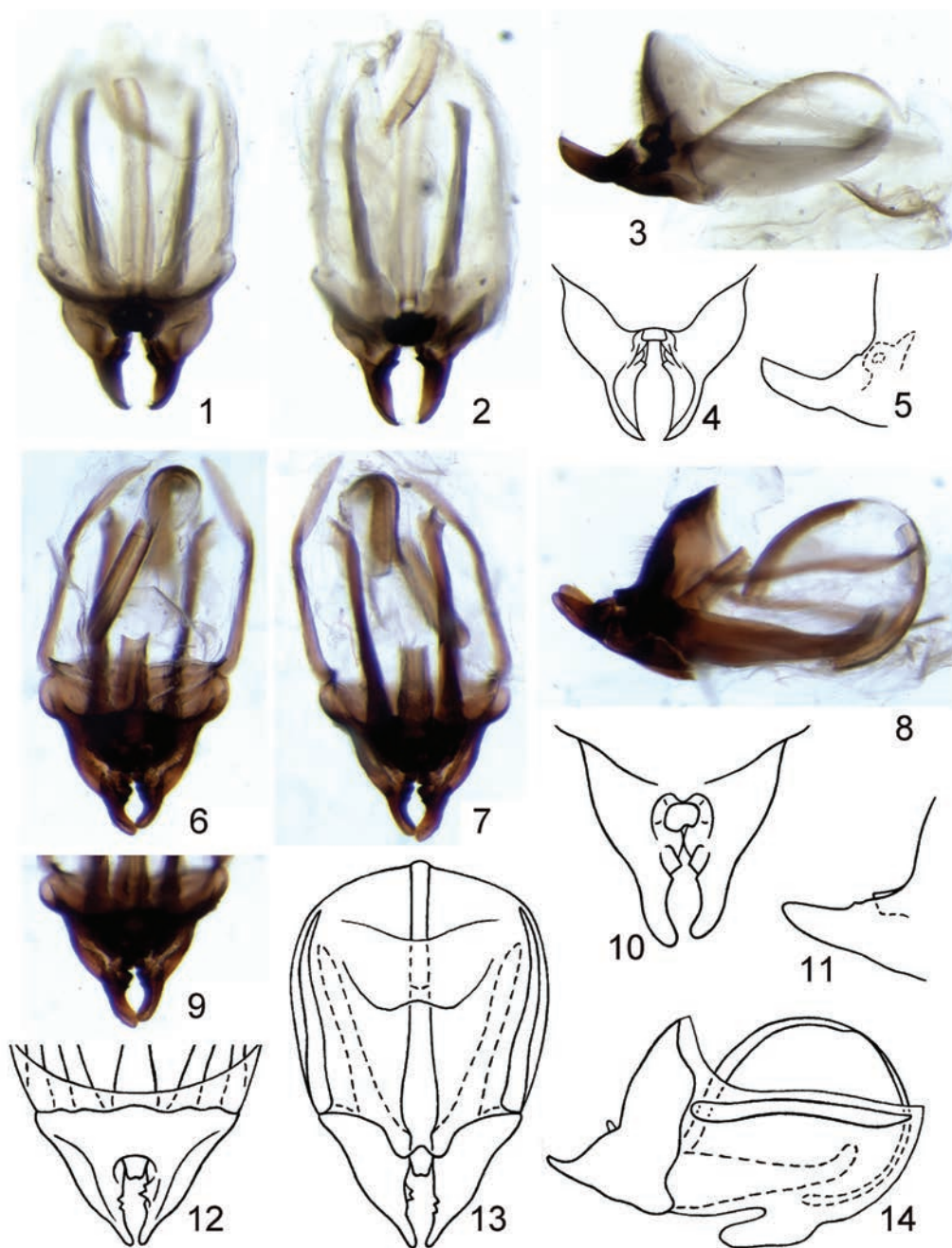
**Etymology.** The species is named in honour of its collector, Russian coleopterist Dr. Boris Korotyaev.

***Diatrypa (Latispeculum) nikitai* sp. nov.**  
(Figs III: 17; IX: 4; XI: 6–11)

**Holotype.** Male; **Peru**, 57 km from Iquitos City (between Puente Itaya and San Jaquin), along road near Rio Amazon, 3 Feb. 2006, N. Kluge (ZIN).

**Description.** Male (holotype). Colouration of body yellowish with following marks: distinct numerous grayish brown





**Figs XI (1–14).** *Diatrypa*, male: 1–5, *D. borisi* sp. nov.; 6–11, *D. nikitai* sp. nov.; 12–14, *D. raggei* sp. nov. Genitalia from above (1, 6), from below (2, 7, 13), and from side (3, 8, 14); posterior (narrowed) part of epiphallus with guiding rod from above (4), from above and slightly in front (10), and from side (5, 11); posterior half of genitalia from above (12) and from above and slightly in front (9).

dots and small spots on epicranium (excluding hind part of vertex), on pronotum (but pronotal disc also with dark brown transverse stripe along hind edge), on all femora, and on all tibiae; sparse darkish small spots on clypeus, on mandible, and on antennal flagellum; brown tegminal *M* and veins of dorsal tegminal field near its anal edge; whitish membranes in most part of area between *R* and *M* in tegmina; almost transparent stridulatory areas in lower tegmen; darkish most part of metanotum, of abdominal tergites, of anal plate, and of cercal proximal half. Structure of body similar to that of *D. borisi*, but metanotum with gland consisting of a pair of rather small semiglobular convexities near anterior fold (behind it) and of one larger (but not higher) convexity behind them (Fig. III: 17), tegmina with 8–9 oblique veins and slightly more oblique mirror in dorsal field as well as with 12 branches of *Sc* comb (Fig. IX: 4), hind wings slightly less exposed behind tegmina, apices of anal and genital plates narrowly truncate, epiphallus with anterior part less vertical and with posterior part less curved in profile and having narrowly rounded (not acute) apex, and guiding rod in genitalia slightly wider and somewhat asymmetrical (Figs XI: 6–11).

Female unknown.

Length in mm. Body 9; body with wings 16.5; pronotum 2.4; tegmina 13; hind femora 7.5.

**Comparison.** The new species is most similar to *D. borisi* and *D. dentata* in the male genitalia, but it differs from them in the distinctly more spotted colouration, presence of a whitish area between *R* and *M* in the male tegmina as well as of a pair of small convexities behind the anterior fold of metanotum (*vs.* these convexities are rather large or absent), and male genitalia very similar to those of *D. borisi* but distinguished by the above-listed characters. From all the other congeners, the new species differs in the same characters as *D. borisi* (except for colouration and the length of ovipositor).

**Etymology.** The species is named in honour of its collector, Russian entomologist Dr. Nikita Kluge.

***Diatrypa (Latispeculum) raggei* sp. nov.**  
(Figs I: 1–6; XI: 12–14)

**Holotype.** Male; **Guyana**, “British Guiana, Essequibo R., Moraballi Greek, 7.XI.1929, B. M. 1929 – 485”, “5638”, “see notes”, “*Diatrypa* sp., det. B.C. Townsend, 1981” (NHM).

**Paratype.** Female, same data, but 8 Oct. 1929 and with number “4273” (instead of “5638”) (NHM).

**Description.** Male (holotype). Colouration of body almost uniformly grayish brown, but with tegmina light brown and having semitransparent stridulatory areas, and with cerci also light brown. Structure of body more or less similar to that of *D. borisi* and *D. nikitai*, but structure of metanotum unknown, hind wings distinctly exposed behind tegmina (almost as in *D. borisi* and slightly more exposed than in *D. nikitai*), dorsal tegminal field with 8–9 oblique veins and short diagonal vein as well as with strongly oblique mirror (its length and width almost equal) and very long apical area (Fig. I: 1), lateral tegminal field with 13–14 branches of *Sc* comb, genital plate with rounded apex, epiphallus most similar to that of *D. nikitai* but with apices of lateral lobes of posterior part distinctly thinner and slightly shorter as well as with medial tubercles of these lobes somewhat asymmetrical and lateroproximal edges of epiphallic anterior part having less projected and less long rounded convexities (for comparison see Figs XI: 6, 7, 9, 12, 13), and guiding rod of genitalia symmetrical as well as narrower and almost truncate (hardly notched) at apex (for comparison see Figs XI: 6–14).

Female. General appearance as in male, but colouration of body slightly lighter (light grayish brown), and structure of tegmina and of abdominal apex more or less similar to that of *D. borisi* (however ovipositor much shorter: hind femur approximately 1.2 times as long as ovipositor).

Length in mm. Body: male 11.5, female 10.5; body with wings: male 17.5, female 17.5; pronotum: male 2.2, female 2.3; tegmina: male 12, female 12.5; hind femora: male 8, female 8; ovipositor 6.5.

**Comparison.** The new species is most similar to *D. nikitai* in the structure of male genitalia, but it differs from the latter in the longer both mirror and apical area in male tegmina, shorter diagonal vein in these tegmina, and the above-listed characters of male genitalia. From all the other congeners, the new species differs in the following combination of characters: the above-mentioned characters of male tegmina, the same characters of colouration as *D. borisi*, the same characters of male genitalia as *D. nikitai*, and a rather short ovipositor.

**Etymology.** The species is named in honour of the British orthopterist Dr. D.R. Ragge who loan me the specimens from NHM.

***Diatrypa (Latispeculum) aequatori*  
sp. nov.**

(Figs III: 18; IX: 5; XII: 1–5)

**Holotype.** Male; **Ecuador**, eastern part, ~70 km SE of Lago Agrio Town, environs of S. Pablo de Kantesiya Vill. on Rio Aguarico, lowlying primary forest, on leaf of tree, at night, 10–17 Nov. 2005, A. Gorochoy, A. Ovtshinnikov (ZIN).

**Paratype.** Female, same data as for holotype (ZIN).

**Description.** Male (holotype). Colouration of body light grayish brown with slightly darker head dorsum and pronotum, rather numerous darkish dots and small spots on legs (on femora, tibiae and hind tarsi), sparse small darkish spots on antennal flagellum, brown veins situated along anal edge of tegmina, semitransparent stridulatory areas in lower tegmen, grayish brown most part of abdominal tergites and of sternites, and a few darkened marks on anal and genital plates. Structure of body similar to that of *D. borisi* and *D. nikitai* but distinguished by following features: scape almost 1.2 times as wide as rostrum between antennal cavities; metanotum rather short, with gland consisting of a pair of rather large finger-like pro-

cesses in middle part and low sinuate fold behind them (Fig. III: 18); tegmina almost as in *D. borisi* and *D. dentata* but with hardly shorter and slightly shorter apical area, respectively, and with 12–13 branches of *Sc* comb (Fig. IX: 5); anal plate with roundly truncate apex; genitalia with anterior part of epiphallus somewhat similar to that of *D. borisi* but distinctly wider (Figs XII: 1, 2), with lateral lobes of posterior epiphallic part distinctly higher in proximal half and somewhat lower (narrower) in distal half (Figs XII: 3, 5), and with guiding rod narrower and narrowly rounded at apex (Fig. XII: 4).

**Female.** General appearance as in male, but darkish dots and small spots on legs less distinct, tegmina with six longitudinal veins and three branches of *Cu* comb in dorsal field and with 6–7 branches of *Sc* comb, and other tegminal structures and abdominal apex typical of *Diatrypa* species with long ovipositor (hind legs missing).

Length in mm. Body: male 11, female 10; body with wings: male 13.7, female 13.8; pronotum: male 2.5, female 2.6; tegmina: male 10.5, female 10; hind femora, male 8; ovipositor 10.

**Comparison.** The new species is most similar to *D. borisi*, *D. nikitai* and *D. raggei* in the structure of male genitalia, but it is distinguished from them by the shape of posterior epiphallic part in the profile, guiding rod narrower and having a narrowly rounded apex, male metanotum having larger middle processes (from *D. borisi* and *D. nikitai* only), and male tegmina with distinctly shorter apical areas (from *D. raggei* only). From all the other congeners, the new species differs in the same characters as *D. borisi* except the structure of male metanotum.

**Etymology.** The species is named after the equator (“aequator” in Latin).

***Diatrypa (Latispeculum) nebulosa*  
sp. nov.**

(Figs III: 19; IX: 6; XII: 6–10)

**Holotype.** Male; **Ecuador**, western part, 10 km E of Agua Blanca Vill. located not far from

Puerto Lopez Town, San Sebastian Forest, 700 m, cloud primary forest, on leaf of bush, at night, 26–29 Oct. 2005, A. Gorochov, A. Ovtshinnikov (ZIN).

**Description.** Male (holotype). Colouration and structure of body similar to those of *D. aequatori* but with following differences: venation of apical part of dorsal tegminal field completely darkened, from brown to dark brown; most part of tegminal *M* brown; genital plate almost completely light; paired processes at middle of metanotum significantly smaller (convexity-like) and partly fused with one another; metanotal fold behind these processes less distinct (Fig. III: 19); tegmina with mirror slightly smaller, apical area somewhat longer, and *Sc* comb with 13–14 branches (Fig. IX: 6); genitalia with anterior part of epiphallus smaller, with lateral lobes of posterior epiphallic part longer and high in both (distal and proximal) halves as well as partly semimembranous and more or less hooked at apex (Figs XII: 6–10), and with guiding rod turned upwards and somewhat forwards (its distal half immersed under anterior epiphallic part and insufficiently visible).

Female unknown.

Length in mm. Body 11.2; body with wings 15; pronotum 2.7; tegmina 11; hind femora 8.5.

**Comparison.** The new species is similar to *D. dentata*, *D. borisi*, *D. nikitai*, *D. raggei* and *D. aequatori* in the structure of male genitalia, but it differs from them in the lateral lobes of posterior epiphallic part semimembranous and high in distal and proximal halves. From all the other congeners, the new species is distinguished by the characters of male genitalia mentioned above in combination with the following features: body colouration more or less uniformly light, rostrum of head moderately wide, male tegmina wide and long, hind wings long, and paired processes of male metanotum small and partly fused with each other.

**Etymology.** The species name is the Latin word “*nebulosa*” (misty, foggy).

***Diatrypa (Latispeculum) robusta*  
sp. nov.**

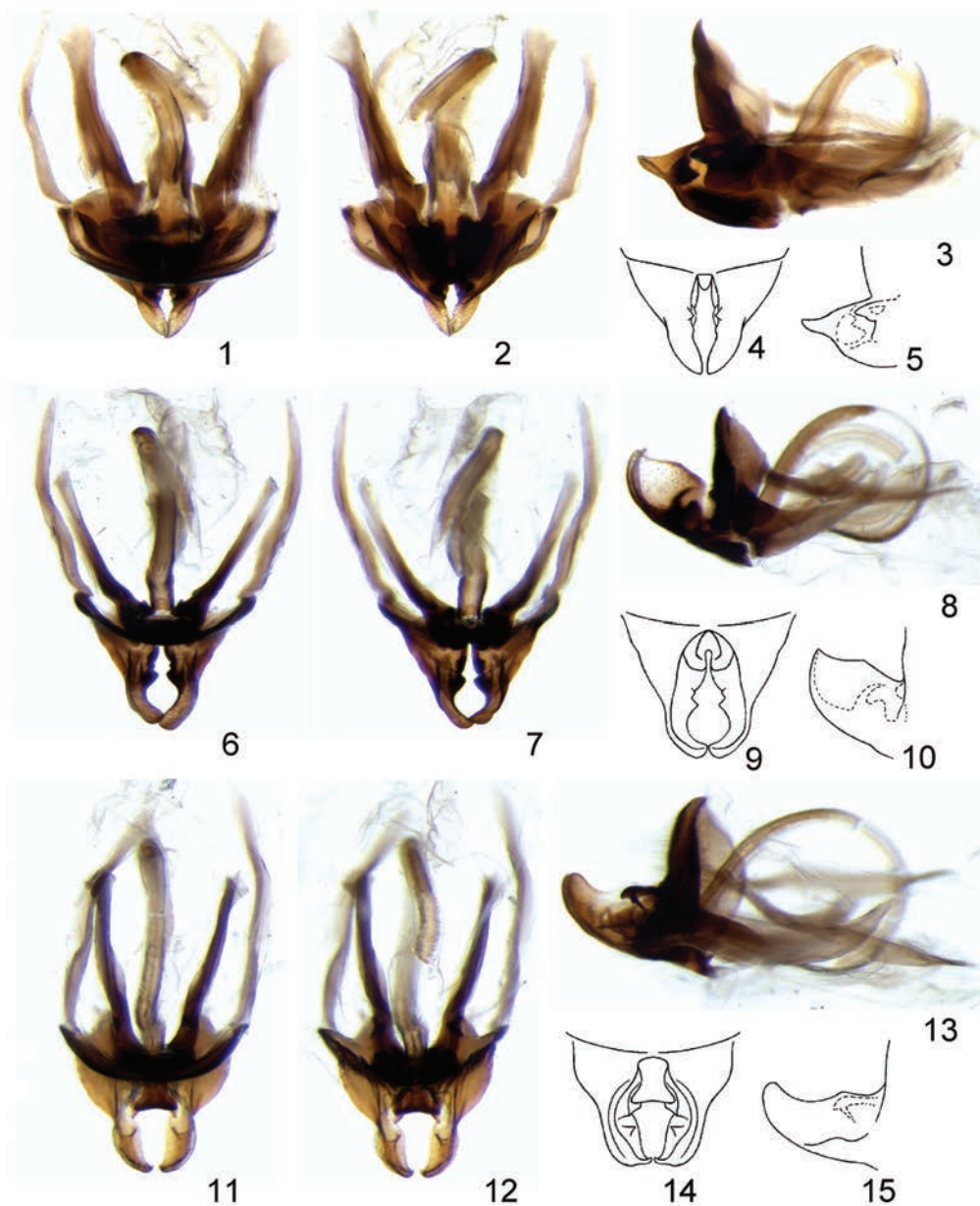
(Figs III: 20; IX: 7; XII: 11–15)

**Holotype.** Male; **Mexico**, Chiapas State, 130 km WN of Tapachula Town, environs of Ejido Las Golondrinus Vill. near El Triunfo Reserve, 800–1000 m, secondary forest, at light, 13–17 May 2006, coll. A. Gorochov, M. Berezin (ZIN).

**Paratypes.** Two males and 1 female, same data as for holotype (ZIN).

**Description.** Male (holotype). Colouration of body light grayish brown with sparse small darkish spots on antennal flagellum, slightly darkened lateral lobes of pronotum, brown transverse stripe on pronotal disc along its hind edge, rather numerous darkish dots on femora and tibiae (hind legs additionally with a pair of rather small dark brown longitudinal spots on apical part of each hind femur, and with slight darkish spots on hind tibiae near spines), brown veins and crossveins in dorsal tegminal field near anal edge, semitransparent stridulatory areas of lower tegmen, grayish brown metanotum and very numerous small spots on abdominal tergites, brown most part of anal plate, and almost yellowish following parts: genital plate, bases of cerci, apical parts of fore and middle tibiae, most part of fore and middle tarsi as well as of hind basitarsi and of third segments of hind tarsi. Head moderately high, with rostrum between antennal cavities almost equal to scape in width. Pronotum approximately 1.3 times as wide as long, with moderately high lateral lobes, and with weakly rounded hind edge of disc; metanotum moderately transverse, with rather high anterior transverse fold, with a pair of rather large and almost finger-shaped processes at middle, and with comparatively low fold behind these processes (Fig. III: 20). Tegmina with slightly oblique and somewhat arcuate stridulatory vein, slightly transverse mirror, six oblique veins in dorsal field, moderately long apical area, and 13–14 branches of *Sc* comb (Fig. IX: 7); hind wings somewhat shortened, almost completely covered by tegmina. Legs typical of *Diatrypa* but with





**Figs XII (1–15).** *Diatrypa*, male: 1–5, *D. aequatori* **sp. nov.**; 6–10, *D. nebulosa* **sp. nov.**; 11–15, *D. robusta* **sp. nov.** Genitalia from above (1, 6, 11), from below (2, 7, 12), and from side (3, 8, 13); posterior (narrowed) part of epiphallus with guiding rod from above (4, 9, 14) and from side (5, 10, 15).

inner tympanum slightly more immersed than in other congeners (almost slit-like in proximal part). Abdomen with two pairs of rather high tubercles at base of its dorsum (one pair larger and located on first tergite;

other pair somewhat smaller and located on second tergite near its anterior edge; Fig. III: 20); anal plate triangular, transverse, with rounded apex; genital plate moderately elongate but also with rounded apex

(almost without any apical notch); genitalia: anterior epiphallallic part almost vertical in profile, lateral lobes of posterior epiphallallic part moderately high and slightly curved upwards, apical parts of these lobes rounded in profile, medial surface of each of these lobes with distinct tooth at middle, and guiding rod rather large and with strongly widened apex having very shallow concavity on its posterior edge (Figs XII: 11–15).

Variations. Colouration of body sometimes slightly lighter, yellowish with grayish tinge and with darker marks approximately as in holotype (but hind tibiae almost uniformly light); length and width of tegminal mirror sometimes almost equal.

Female. General appearance as in male, but pronotal disc with a few small darkish spots on disc (dark posterior transverse stripe on disc also present), venation of tegmina uniformly light grayish brown, five posterior abdominal sternites and genital plate more or less darkened (these darkenings possibly not original), tegmina with seven longitudinal veins (three of them with common stem) and four branches of *Cu* comb in dorsal field as well as with 5–6 branches of *Sc* comb in lateral field, abdominal apex more or less similar to that of *D. chaco* and *D. dentata*.

Length in mm. Body: male 10–11, female 9; body with wings: male 13–13.5, female 13.5; pronotum: male 2.3–2.5, female 2.5; tegmina: male 9.5–10, female 10; hind femora: male 7.3–7.7, female 7.5; ovipositor 8.

*Comparison.* The new species is similar to *D. dentata*, *D. borisi*, *D. nikitai*, *D. raggei*, *D. aequatori* and *D. nebulosa* in the structure of male genitalia, but distinguished by the posterior part of epiphallus moderately high and somewhat curved upwards in profile, and guiding rod of male genitalia large and with a strongly widened apical part. From all the other congeners, *D. robusta* differs in the above-mentioned genital characters in combination with the body colouration more or less uniformly light, metanotum and anterior abdominal tergites of male with characteristic specializations,

wings slightly shortened (hind wings are almost completely covered by the tegmina), mirror of male tegmina larger and/or less transverse, apical area of male dorsal tegminal field somewhat shortened, and ovipositor slightly longer than the hind femur.

*Etymology.* The species name is the Latin word “*robusta*” (robust).

***Diatrypa (Latispeculum) robusta tuxtlas*  
subsp. nov.**

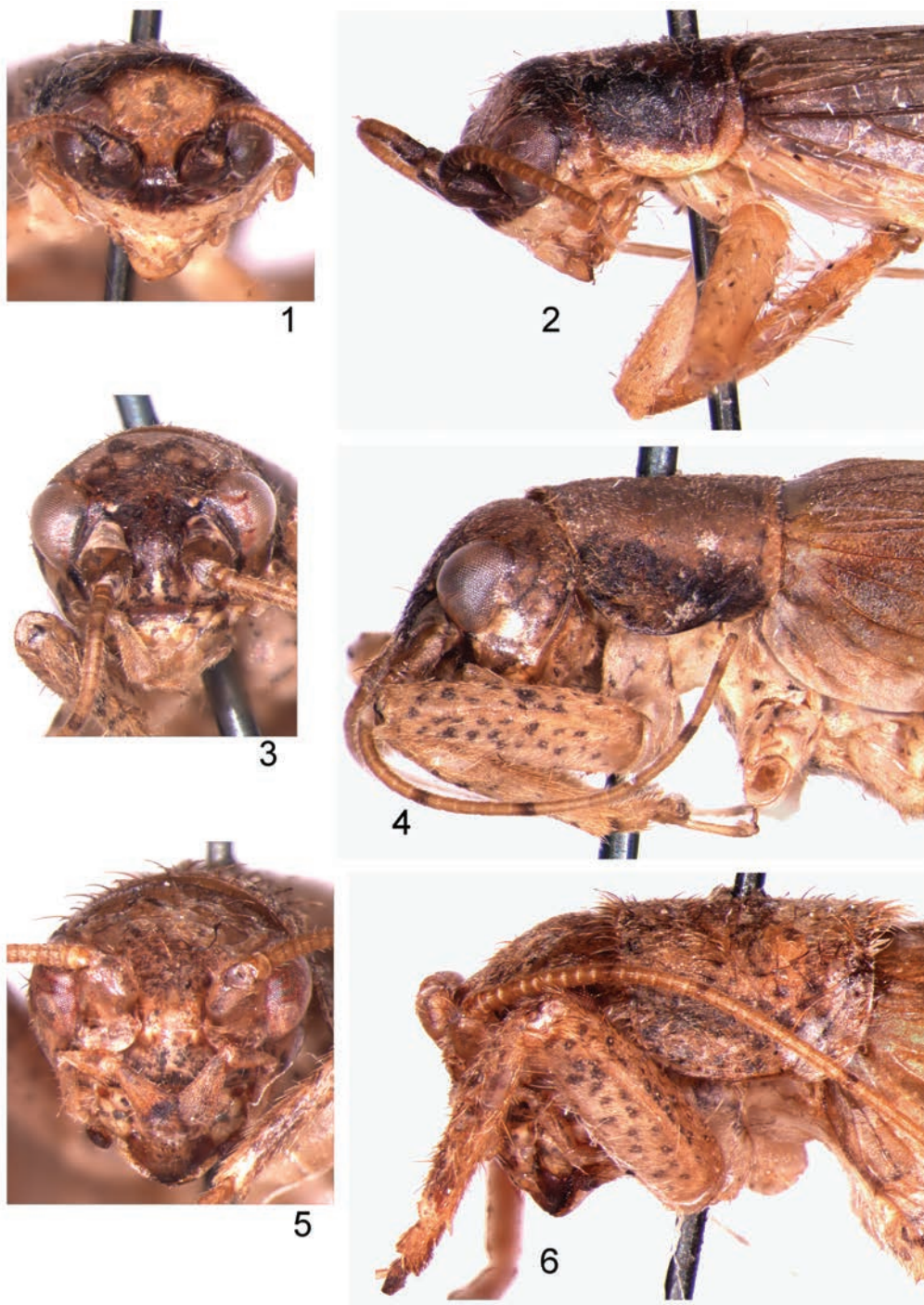
(Figs XIII: 3, 4)

*Holotype.* Female; **Mexico**, Veracruz State, 15–20 km NE of Catemaco Town, Los Tuxtlas (biostation of Mexico University), rainforest on hills in 2 km from sea coast, at light, 6–17 Nov. 2006, coll. A. Gorochov, A. Ovtshinnikov (ZIN).

*Paratypes.* Two females, same data as for holotype (ZIN).

*Description.* Female (holotype). General appearance similar to that of *D. robusta robusta* **stat. nov.**, but head rostrum darker (almost brown), lower part of epicranium and anterior part of head dorsum with diverse brown spots (Fig. XIII: 3), most part of lateral pronotal lobes darker (brown), pronotal disc almost uniformly light brown, tegmina with most part of lateral field slightly darker than dorsal field (intermediate between brown and light brown), legs with numerous very distinct grayish brown dots and small spots on femora and somewhat less numerous ones on tibiae (Fig. XIII: 4), mesothoracic sternite as well as fore and middle coxae with small darkish marks, most part of metathoracic sternite as well as of abdominal ones slightly darkened (gray), cerci yellowish with numerous small grayish brown marks, genital plate also yellowish but with brownish median stripe, dorsal tegminal field with six longitudinal veins (three of them with common stem) and three branches of *Cu* comb, lateral tegminal field with 3–4 branches of *Sc* comb, ovipositor almost equal to hind femur in length.

Variations. One paratype almost without dark marks on lower part of epicranium and with upper parts of lateral pronotal lobes almost light brown.



**Figs XIII (1–6).** *Diatrypa*, female: 1, 2, *D. decora izyaslavi* subsp. nov.; 3, 4, *D. robusta tuxtlas* subsp. nov.; 5, 6, *D. robusta panama* subsp. nov. Head in front (1, 3, 5); head, pronotum and fore leg from side (2, 4, 6).



Male unknown.

Length in mm. Body 9–11; body with wings 13–14; pronotum 2.4–2.6; tegmina 9.3–9.8; hind femora 7.3–7.6; ovipositor 7.4–7.8.

*Comparison.* The new subspecies differs from the nominotypical one in a more spotted colouration of head, legs and cerci, in the pronotal disc lacking any dark marks along its hind edge, and in the lateral field of tegmina somewhat darker than their dorsal field.

*Etymology.* The species name is given after Los Tuxtlas Biostation.

***Diatrypa (Latispeculum) robusta panama* subsp. nov.**

(Figs XIII: 5, 6)

*Holotype.* Female; **Panama**, ~50 km SW of Panama City, “Parque Nacional Cerro Campana”, ~800 m, 23 Aug. 1998, coll. B. Korotyaev (ZIN).

*Description.* Female (holotype). General appearance very similar to that of *D. robusta robusta*, but lower part of epicranium with a few grayish brown marks, most part of labrum clearly darker (almost brown; Fig. XIII: 5), colouration of pronotal disc more or less similar to that of *D. robusta tuxtlas*, lateral lobes of pronotum slightly lighter (of same colouration as disc) and with rather numerous darkish dots (Fig. XIII: 6), hind tibiae almost uniformly light, abdominal sternites yellowish, cerci with yellowish proximal part and grayish brown middle part (distal part of cerci missing), genital plate light brown, dorsal tegminal field with six longitudinal veins and four branches of *Cu* comb, lateral tegminal field with 3–4 branches of *Sc* comb, and ovipositor approximately as long as hind femur.

Male unknown.

Length in mm. Body 10; body with wings 14.8; pronotum 2.7; tegmina 10.5; hind femora 8.2; ovipositor 8.

*Comparison.* The new subspecies differs from *D. robusta robusta* in the pronotal disc almost uniformly light brown, cerci

with darkened middle (and possibly distal) parts, and ovipositor approximately as long as hind femur. From *D. robusta tuxtlas*, the new subspecies differs in the dorsal and lateral tegminal fields light (practically identical in colouration), legs less spotted, and a different colouration of cerci. From the other species indubitably distributed in Panama, this subspecies is distinguished by a distinctly longer ovipositor (from *D. apithoides*), almost uniformly light hind tibiae (from *P. championi*), the absence of any dark longitudinal stripe on the outer surface of hind femora (from *D. univittata*), and more spotted legs as well as distinctly shorter hind wings and ovipositor (from *D. borisi*).

*Etymology.* The species name is given after the country Panama.

***Diatrypa maculata* sp. nov.**

(Figs XIV: 1–3)

*Holotype.* Female; **Panama**, Panama City, “Parque Natural Metropolitano”, forest canopy, 28 Aug. 1998, B. Korotyaev (ZIN).

*Description.* Female (holotype). Body rather narrow, more or less similar to that of *Diatrypa* s. str. in shape. Colouration light brown with following marks: epicranium under rostral apex and antennal cavities yellowish with grayish tinge; dorsum of head between eyes with a few small and almost indistinct darkish spots; antennal flagellum with numerous very small darkish spots (in proximal part of flagellum, these spots sparse); mouthparts yellowish; pronotum with a pair of distinct dark brown spots on disc, rather narrow and sinuate dark longitudinal stripe on each lateral part of disc (this stripe partly fused with above-mentioned spot), comparatively large darkened area on posterior part of disc, grayish brown (but not dark) most part of lateral lobes, and yellowish stripe on each of these lobes along ventral edge (Figs XIV: 1–3); tegmina with small darkened area at base of dorsal field and more or less semitransparent membranes of lateral field; exposed parts of hind wings grayish brown; legs with





**Figs XIV (1–9).** *Diatrypa*, female: 1–3, *D. maculata* sp. nov.; 4–9, *D. striata* sp. nov. (4–6, holotype). Head and fore leg or legs in front (1, 4, 7); head and pronotum from above (2, 5, 8) and from side (3, 6, 9).

yellowish coxae and bases of femora, dark lines along both ventral keels of fore femora, darkish similar lines on middle femora, two longitudinal grayish brown stripes on inner surface of fore femora and on outer surface of middle femora, darkish dots and weakly distinct inner longitudinal lines on distal half of hind femora as well as small spots on dorsal surface of these femora, weakly darkened areas on dorsal part of fore and

middle tibiae, dark brown dorsal spot near base of hind tibiae, darkish areas on distal third of these tibiae between spines, and darkish areas at apex of hind tibiae and at middle of all tarsi; all sternites, genital plate and proximal half of cerci yellowish. Head slightly dorsoventrally depressed; scape approximately 1.3 times as wide as rostrum between antennal cavities. Pronotum 1.25 times as wide as long, slightly narrowing

to head, with weakly angular hind edge of disc and moderately low lateral lobes. Tegmina extending behind apex of hind femora; dorsal field with six longitudinal veins (two lateral veins having common stem) and one branch of *Cu* comb; lateral field with 3–4 almost longitudinal branches of *Sc* comb; hind wings distinctly exposed behind tegminal apex, reaching base of distal third of hind tibiae. Legs with tympana more or less similar to those pictured in Figs I: 2, 3, and with hind basitarsi having four outer and two inner denticles. Abdominal apex similar to that of *D. decora morona*, but ovipositor distinctly shorter than hind femur.

Male unknown.

Length in mm. Body 8.8; body with wings 13.5; pronotum 1.8; tegmina 8.7; hind femora 5.6; ovipositor 4.7.

**Comparison.** The new species differs from all the other congeners in very characteristic colouration of pronotum in combination with long hind wings, lineated fore and middle femora, and rather short ovipositor.

**Etymology.** The species name is the Latin word “*maculata*” (spotted).

### ***Diatrypa striata* sp. nov.**

(Figs XIV: 4–9)

**Holotype.** Female; **Peru**, 57 km from Iquitos City (between Puente Itaya and San Juan), along road near Rio Amazon, 3 Feb. 2006, N. Kluge (ZIN).

**Paratype.** Female; **Ecuador**, Morona Santiago Prov., bank of Rio Morona near border with Peru, environs of Puerto Morona Vill., ~300 m, primary forest, at light, 5–15 Jan. 2010, coll. A. Gorochov (ZIN).

**Description.** Female (holotype). General appearance similar to *D. maculata*, but with following differences: epicranium under rostral apex and antennal cavities yellowish with arcuate darker stripe situated between ventral edges of eyes and running along clypeal suture (partly on upper part of clypeus) in median part (median part of this stripe light brown, but its lateral parts distinctly darker, brown); anterior half of

head dorsum brown but with rostral apex and medial parts of antennal cavities whitish (dorsal edges of these cavities brown and separated from large posterior brown area by very narrow whitish stripes); eyes light brown dorsally, brown ventrally, and with whitish longitudinal band in middle part; antennal flagellum uniformly yellowish; pronotum light brown with slightly darker most part of lateral lobes and areas on middle and posterior parts of disc as well as with a pair of dark brown short oblique stripes on anterior part of disc and two small yellowish spots in anteroventral corner of each lateral lobe (Figs XIV: 4–6); tegmina with almost semitransparent membranes in dorsal field also; colouration of legs similar to that of *D. maculata* but distinguished by hind femora with only a few darkened spots on dorsal surface (these spots separated from each other by yellowish spots), by hind tibiae with moderately long (wide) light ring near apical part, and by tarsi almost without darkened area in middle part; cerci yellowish with several darkish marks; tegmina with five longitudinal veins and three branches of *Cu* comb in distal field, and with 6–7 branches of *Sc* comb in lateral field (latter branches slightly less longitudinal than in *D. maculata*); ovipositor almost equal to hind femur in length.

**Variations.** Paratype with less distinct whitish area between antennae (Fig. XIV: 7), hardly darker general colouration of pronotum and of hind part of vertex but with clearly less dark (less distinct) paired spots on disc near its anterior edge (Fig. XIV: 8), more spotted most part of lateral lobes of pronotum, distinctly darker posteroventral areas of these lobes (Fig. XIV: 9), and darkish longitudinal stripe on outer surface of hind femur.

Male unknown.

Length in mm. Body 7–7.5; body with wings 13–13.5; pronotum 1.8–1.9; tegmina 9.3–9.6; hind femora 5.8–6; ovipositor 5.5–5.7.

**Comparison.** The new species is most similar to *D. maculata* in the colouration

of fore and middle femora but distinctly distinguished from it by the characteristic colouration of head and pronotum (especially by a whitish rostral apex), and by a longer ovipositor. Paratype of *D. striata* is also similar to *D. univittata* in the colouration of hind femora, but it differs from the latter species in the presence of characteristic darkened arcuate stripe on epicranium under the antennal cavities. From the other congeners, *D. striata* differs in the same characters of colouration (face of epicranium with a darkened arcuate stripe, rostral apex whitish, pronotum distinctly spotted) in combination with lineated fore and middle femora, long hind wings, and the ovipositor almost as long as the hind femur.

**Etymology.** The species name is the Latin word “*striata*” (striated, striped).

**Remarks.** The holotype and paratype probably belong to different subspecies, but this material is insufficient, not allowing me to understand their variability.

### ***Diatrypa lineata* sp. nov.**

(Fig. XV: 1)

**Holotype.** Female; **Ecuador**, Morona Santiago Prov., bank of Rio Morona near border with Peru, environs of Puerto Morona Vill., ~300 m, primary forest, at light, 5–15 Jan. 2010, coll. A. Gorochov (ZIN).

**Description.** Female (holotype). Colouration of body yellowish with hardly darker (almost light brown) pronotal disc, black stock of tegminal *Sc*, dark brown part of tegminal *Cu*, brown lateral parts of other longitudinal veins of dorsal tegminal field, light brown rest of tegminal longitudinal veins, rather numerous darkish (but not very distinct) dots on femora and tibiae, and slightly larger darkish spot on dorsal surface of middle tibiae not far from their apex (Fig. XV: 1). Head slightly depressed dorso-ventrally; eyes moderately high, not longitudinal; scape almost equal to rostrum between antennal cavities in width. Pronotum 1.15 times as wide as long, slightly narrowing to head, and with moderately low lateral lobes. Tegmina extending to base of

middle third of hind tibiae; dorsal field with six longitudinal veins (2–3 lateral veins with common stem) and three branches of *Cu* comb; lateral field with six branches of *Sc* comb (these branches almost longitudinal); apical part of hind wings slightly exposed behind tegminal apex. Fore tibiae distinguished from those pictured in Figs I: 2, 3 by both tympana somewhat shorter, and inner tympanum slightly narrower and partly immersed; hind basitarsi with four outer and one inner denticles. Abdominal apex typical of *Diatrypa*, but ovipositor somewhat longer than hind femur (this femur approximately 1.2 times as long as ovipositor).

Male unknown.

Length in mm. Body 9.8; body with wings 13.5; pronotum 2.4; tegmina 10; hind femora 7.5; ovipositor 9.

**Comparison.** The new species differs from all the other congeners in almost uniformly light colouration combined with a very distinct black longitudinal vein (*Sc* stock) in the tegminal lateral field, slightly dotted legs, and the ovipositor somewhat longer than the hind femur.

**Etymology.** The species name is the Latin word “*lineata*” (with lines).

### ***Diatrypa punctata* sp. nov.**

(Fig. XV: 2)

**Holotype.** Female; **Ecuador**, eastern part, ~70 km SE of Lago Agrio Town, environs of S. Pablo de Kantesiya Vill. on Rio Aguarico, lowlying primary forest, on leaf of bush, at night, 10–17 Nov. 2005, A. Gorochov, A. Ovtshinnikov (ZIN).

**Description.** Female (holotype). General appearance similar to that of *D. lineata* but distinguished by following characters: epicranium with hardly darker (almost light brown) dorsum, a few small brown marks under rostral apex and under antennal cavities, narrow darkish stripes along dorsal edges of antennal cavities (near them), darkish areas behind eyes, and darkish smaller spots and stripes between these areas on posterior half of vertex; antennal flagellum with sparse small darkish spots;





**Figs XV (1, 2).** *Diatrypa*, female: 1, *D. lineata* **sp. nov.**, body from side and slightly from above; 2, *D. punctata* **sp. nov.**, body from above and slightly from side.

pronotum with sparse grayish brown dots on disc and lateral lobes as well as with a few grayish brown stripes (a pair of narrow stripes situated along lateral edges of disc; rather wide unpaired stripe situated transversally, along posterior edge of disc; a pair of narrow and very short longitudinal stripes situated on disc near its anterior edge; Fig. XV: 2); darkened veins of tegmina less distinct, light brown but with *Sc* stock darker (almost grayish brown); darkish dots on legs somewhat more distinct (Fig. XV: 2); scape approximately 1.3 times as

wide as rostrum between antennal cavities; dorsal tegminal field with six longitudinal veins similar to those of *D. lineata* and four branches of *Cu* comb; lateral tegminal field with seven branches of *Sc* comb; inner tympanum slightly wider; ovipositor almost 1.4 times as long as hind femur.

Male unknown.

Length in mm. Body 8; body with wings 13.8; pronotum 2.5; tegmina 9.7; hind femora 7.9; ovipositor 11.

**Comparison.** The new species is most similar to *D. lineata*, but it differs from the



latter in the above-mentioned characters including distinctly longer ovipositor. From all the other congeners, *D. punctata* differs in the same features as *D. lineata* (except for colouration of *Sc* stock in the tegmina and of pronotum) in combination with the presence of darkened stripes on pronotal disc and with a long ovipositor.

**Etymology.** The species name is the Latin word “*punctata*” (dotted).

***Diatrypa volodymyri* sp. nov.**

(Figs XVI: 1, 2)

**Holotype.** Female; **Peru**, forest-garden in Satipo Town, at light, 15 Oct. – 6 Nov. 2008, A. Gorochov, M. Berezin, L. Anisyutkin, E. Tkatsheva, V. Izersky (ZIN).

**Description.** Female (holotype). Body narrow, more or less similar in shape to that of *Diatrypa* s. str. Colouration yellowish with following ornament: head with light brown dorsum having slightly darker anterior part, brown rostrum and upper part of face (including borders of antennal cavities), narrow dark brown stripe along dorsal edge of each antennal cavity (near it), brown area behind each eye but having dark brown dorsal and ventral edges, and light brown scape and pedicel (Fig. XVI: 1); pronotum with brown disc having dark brown lateral edges (Fig. XVI: 2); dorsal tegminal field light brown with grayish tinge, brown longitudinal veins, and slightly lighter crossveins (these crossveins slightly darker than membranes of this field); lateral tegminal field semitransparent with most *Sc* branches brownish and rest of venation light brown; fore femora with very numerous and very small darkish dots; middle femora with less numerous and slightly larger darkish dots as well as with narrow darkish longitudinal stripe on upper part of proximal half of outer surface; hind femora with also numerous but weakly darkened dots, a pair of dark brown marks near apex, and a few small and narrow grayish brown spots on dorsal surface; fore and middle tibiae with several small grayish

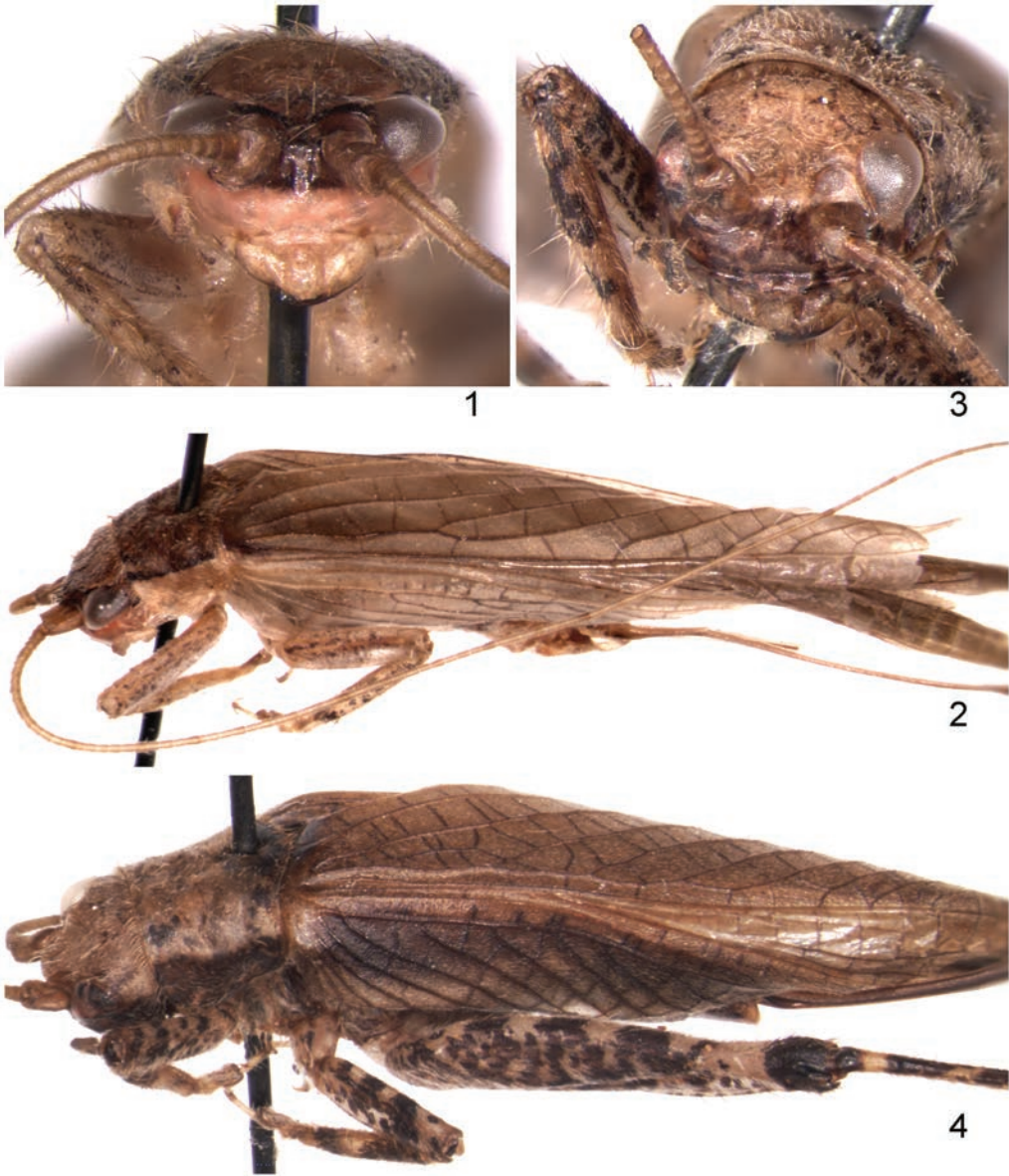
brown spots (Fig. XVI: 2); hind tibiae with slightly darkened apical part and bases of spines; hind tarsi with partly darkish second segment; cerci with not numerous and very small darkish marks on proximal half. Head distinctly depressed dorso-ventrally; eyes low and longitudinal (Figs XVI: 1, 2); scape almost 1.5 times as wide as rostrum between antennal cavities. Pronotum 1.25 times as wide as long, low, moderately narrowing to head, with roundly angular hind edge. Tegmina long, extending distinctly behind abdominal apex, with five longitudinal veins and four branches of *Cu* comb in dorsal field, and with 7–8 branches of *Sc* comb in lateral field (these branches partly oblique/partly longitudinal); hind wings distinctly longer than tegmina, significantly exposed behind tegminal apex. Genital plate with almost narrowly truncate apex, i.e., with apical notch clearly shorter than in all other congeners studied here; ovipositor slightly shorter than hind femur.

Male unknown.

Length in mm. Body 8.5; body with wings 15.5; pronotum 1.9; tegmina 10.5; hind femora 6.5; ovipositor 6.

**Comparison.** The new species is most similar to *D. legnotos* in the body colouration and shape of eyes, but it is distinguished from the latter species by the dark area of pronotum distinctly wider than long and fore and middle legs dotted or spotted (in *D. legnotos*, this area distinctly longer than wide, and these legs almost uniformly light). From *D. venado* and *D. brunnea*, also similar to the new species, *D. volodymyri* differs in more contrast colouration of head having a dark upper part of face (including rostrum), and a smaller size (length of pronotum 1.9 mm; vs. 2.3 mm and 2.75 mm, respectively); and from all the other congeners, in the characteristic colouration, low and longitudinal eyes, and almost truncate female genital plate.

**Etymology.** The species is named in honour of one of its collectors, Volodymyr Izersky (Izersky).



**Figs XVI (1–4).** *Diatrypa*, female: 1, 2, *D. volodymyri* sp. nov.; 3, 4, *D. variegata* sp. nov. Head with fore leg in front (1, 3); body partly from above and partly from side (2, 4).

***Diatrypa variegata* sp. nov.**  
(Figs XVI: 3, 4)

**Holotype.** Female; **Peru**, Junin Department, Satipo Prov., ~25 km SE of Satipo Town, environs of Rio Venado Vill., ~1200 m, partly primary / partly secondary forest, at light, 20–23 Oct. 2008, A. Gorochov, M. Berezin, L. Anisyutkin, E. Tkatsheva, V. Izersky (ZIN).

**Description.** Female (holotype). Body colouration light brown with numerous darker spots and areas: lower half of epicranium (under rostral apex, antennal cavities and eyes) brown with small and slightly lighter marks (Fig. XVI: 3); posterior part of vertex with narrow darkish longitudinal stripe behind each eye; mouthparts with small

brown spots on clypeus and on three distal segments of maxillary palpi; antennae with darkish base of scape, a few brown marks on ventral and lateral surfaces of scape, and small sparse brown spots on flagellum; pronotum with grayish brown lateral lobes having a few lightish (not very distinct) marks, and with a pair of dark gray spots on disc near its anterior edge and four dark spots on disc near its posterior edge (two medial ones partly fused with each other; Fig. XVI: 4); tegmina with light grayish brown dorsal field having brown crossveins, and with grayish brown most part of lateral field having almost dark brown venation (Fig. XVI: 4); legs with blackish brown apical part of hind femora, numerous and not very small dark brown spots on other femora and on rest of hind femora, several rather large dark spots on tibiae, more or less spotted fore and middle tarsi (Fig. XVI: 4), and distinctly spotted hind tarsi; abdominal sternites and genital plate brownish gray, but sternites slightly lighter than genital plate. Head moderately depressed dorsoventrally; eyes not longitudinal; scape almost as wide as rostrum between antennal cavities. Pronotum 1.2 times as wide as long, slightly narrowing to head, and with roundly angular posterior edge of disc (Fig. XVI: 4). Tegmina reaching distal third of hind tibiae, with seven longitudinal veins (four of them with common stem) and three branches of *Cu* comb in dorsal field, with 7–8 oblique branches of *Sc* comb in lateral field, and with rather numerous crossveins of dorsal field (crossveins of lateral field less numerous, more or less usual for this genus; Fig. XVI: 4); hind wings almost reaching apex of hind tibiae, with distal part clearly (but not strongly) exposed behind tegminal apex. Legs with tympana distinguished from those pictured in Figs I: 2, 3 by slightly wider outer tympanum and slightly immersed inner tympanum; hind basitarsus with three outer and one inner denticles; genital plate with small posteromedian notch, smaller than in all congeners studied here except *D. volodymyri*; ovipositor distinctly shorter than hind femur.

Male unknown.

Length in mm. Body 9.7; body with wings 17.3; pronotum 2.5; tegmina 13; hind femora 7; ovipositor 5.5.

**Comparison.** The new species is clearly distinguished from all the other congeners by a very variegate colouration (especially by very dark apical parts of hind femora as well as numerous and not very small dark spots on the other femora and on the rest of hind femora) and by the following combination of characters: a rather wide head rostrum, long tegmina and hind wings, oblique (not obliquely longitudinal) branches of tegminal *Sc*, a very small posteromedian notch of genital plate, and a rather short ovipositor.

**Etymology.** This name is the Latin word “*variegata*” (variegate).

## ACKNOWLEDGEMENTS

I thank all my colleagues and friends who helped me during my work in tropical regions of America. I am also grateful to Dr. D.R. Ragge (NHM) for supplying the additional material. This study was supported by the Russian Foundation for Basic Research (project No. 10-04-00682\_a), Presidium of the Russian Academy of Sciences (Program “Biosphere Origin and Evolution of Geo-biological Systems”), and Ministry of Education and Science of the Russian Federation.

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Received November 16, 2012 / Accepted January 14, 2013