

New and little known Phaloriinae (Orthoptera: Gryllidae)

A.V. Gorochov

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1 new genus, 2 new subgenera, 34 new species, and 5 new subspecies of Phaloriinae are described. The status of 1 taxon is reduced from specific to subspecific. 1 neotype and 2 lectotypes are designated. A new synonymy and new generic position of several species are established. Some redescriptions, taxonomic notes, and new data on geographical distribution are given.

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Genus *Trellius* Gorochov, 1988

This genus is divided into 5 subgenera: *Trellius* s. str. with 8-9 species, *Neotrellius* Gorochov, 1992 with 1 species, *Protrellius* Gorochov, 1996 with 8 species, *Zatrellius* subgen. n., and *Vescelotrellius* subgen. n.

Trellius (*Trellius*) *detersus* sp. n. (Figs 7-9)

Holotype. ♂, Cambodia, prov. Rattanakiri, 40-50 km E of Banlung, forest near river, 1-2.III.1998, A. Gorochov (ZIAS).

Paratypes. Cambodia, prov. Rattanakiri: 9 ♂, 6 ♀, same data as holotype (ZIAS); 1 ♂, env. of Banlung, forest near river, 1-2.III.1998, A. Gorochov (ZIAS).

Description. Male (holotype). Size and shape of body typical of this subgenus. Brownish with spotted head, scape of antennae, and legs (pronotum and upper part of head dark brown; lower part of body light brown). Tegmina rather wide, but not very long; width and length of mirror distinctly less than half of hind femur length. Hind

wings slightly longer than tegmina. Spines and spurs of hind tibiae long. Abdomen similar to that of *T. riparius* Gor. and *T. lithophilus* Gor. (Gorochov, 1990), but genitalia with undenticulated paired hind processes of epiphallus, strongly hooked distal part of these processes, and characteristic shape of endoparameral apodemes.

Variation. Sometimes hind part of vertex slightly lighter and with distinct dark longitudinal stripes.

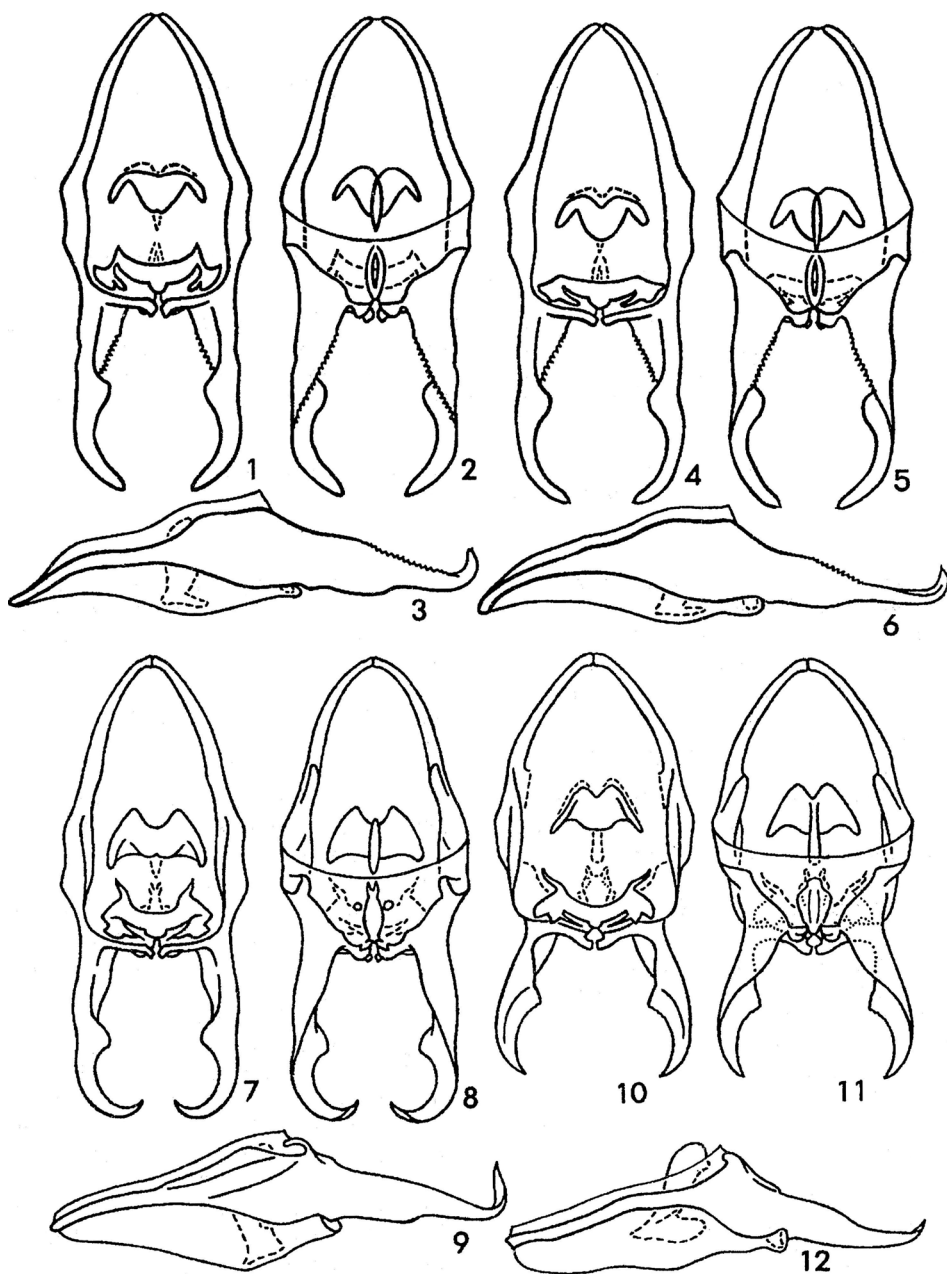
Female. Similar to male in general appearance. Dorsal part of tegmina with 10-11 longitudinal veins and rather sparse regular transverse veinlets. Ovipositor short and with apex typical of this genus.

Length (mm). Body: ♂ 17-20, ♀ 14-15; body with wings: ♂ 22-25, ♀ 22-23; pronotum: ♂ 2.9-3.1, ♀ 2.8-3; tegmina: ♂ 17-18, ♀ 16-17; hind femora: ♂ 13-14, ♀ 12.5-13; hind tibiae: ♂ 12-13, ♀ 11.5-12; distal inner spine of hind tibiae: ♂ 2.9-3.1, ♀ 2.8-2.9; hind metatarsi: ♂ 3-3.2, ♀ 2.8-3; ovipositor 4.5-5.

Comparison. *T. detersus* is very similar to *T. riparius* and *T. lithophilus*, but differs in the smaller male tegmina (width and length of mirror in *T. riparius* and *T. lithophilus* almost equal to half of hind femur length) and some details of the male genitalia (for comparison see Figs 1-9).

Trellius (*Trellius*) *orlovi* sp. n. (Figs 10-12)

Holotype. ♂, Vietnam, prov. Con Tum, distr. Dak To, vill. Mang Xang, 1500-1600 m, primary forest, IX-X.1998, N. Orlov (ZIAS).



Figs 1-12. *Trellius*, ♂. 1-3, *T. lithophilus* Gor.; 4-6, *T. riparius* Gor.; 7-9, *T. detersus* sp. n.; 10-12, *T. orlovi* sp. n. Genitalia from below (1, 4, 7, 10), from above (2, 5, 8, 11), and from side (3, 6, 9, 12).

Paratype. ♀, same data as holotype (ZIAS).

Description. Male (holotype). Similar to preceding species in size, shape of body, and coloration, but tegmina with distinctly transverse mirror (width of mirror approximately equal to half of hind femur length; length of

mirror distinctly less than half of hind femur length), abdomen without tergal glands, genital plate with narrower apical lobule, and genitalia with distinctly shorter paired hind processes of epiphallus, slightly hooked distal part of these processes, peculiar shape

of endoparameres, and wider upper median sclerite between left and right halves of epiphallus.

Female. Similar to male, but tegmina and distal part of hind wings almost dark brown. Tegminal venation and ovipositor as in *T. deterrentus*.

Length (mm). Body: ♂ 14.5, ♀ 12.5; body with wings: ♂ 20.3, ♀ 20.5; pronotum: ♂ 3, ♀ 3.1; tegmina: ♂ 16, ♀ 14; hind femora: ♂ 13.3, ♀ 14; hind tibiae: ♂ 12.6, ♀ 13.4; distal inner spine of hind tibiae: ♂ 2.8, ♀ 2.9; hind metatarsi: ♂ 2.9, ♀ 3; ovipositor 6.

Comparison. The new species is similar to *T. riparius* and *T. lithophilus*, but distinguished from them by the shorter male tegmina with transverse mirror and the same abdominal (and genital) characters of male as from *T. deterrentus*.

Trellius (Protrellius) perbonus sp. n.
(Figs 19-21, 37, 38, 133)

Holotype. ♂, Indonesia, Java (MIZP).

Description. Male (holotype). Size and shape of body typical of this subgenus. Light brown with slightly darker head (except antennae and mouthparts); legs slightly spotted. Tegmina rather wide and long; width and length of mirror almost equal to half of hind femur length. Hind wings slightly longer than tegmina. Spines and spurs of hind tibiae long. Abdomen similar to that of *T. buqueti* (A.-Serv.) and *T. dulcis* Gor. (Gorochoy, 1996), but genitalia with short upper hind processes of epiphallus and long lower ones separated from upper hind processes by deep lateral notches.

Female unknown.

Length (mm). Body 17.5; body with wings 29.5; pronotum 3.3; tegmina 22; hind femora 14.5; hind tibiae 13.5; distal inner spine of hind tibiae 3.5; hind metatarsi 3.5.

Comparison. The new species is similar to *T. buqueti* and *T. dulcis*, but distinguished from them by the more uniform coloration and the male genitalia with very characteristic hind processes of epiphallus.

Trellius (Protrellius) duplicatus sp. n.
(Figs 22-24)

Holotype. ♂, Indonesia, Java (MIZP).

Paratype. 3 ♂, 1 ♀, same data as holotype (MIZP and ZIAS).

Description. Male (holotype). Very similar to *T. buqueti* (see its description in Gorochoy, 1996), but differs in the dark brown

pronotal disc, light brown apex of anal plate and details of genitalia: distinctly broader apical part of guiding rod, slightly larger ectoparameres, and angular lobe at lower edge of base of lower hind epiphallic processes (Fig. 24: a).

Variation. Sometimes pronotal disc with a pair of distinct rufous spots.

Female. As male, but rufous spots of pronotal disc slightly developed. Dorsal part of tegmina with 11-12 longitudinal veins and rather numerous transverse veinlets; lateral part of tegmina with 15-16 branches of Sc (distal part of abdomen and ovipositor partly destroyed).

Length (mm). Body ♂ 17-19; body with wings: ♂ 30-32, ♀ 30; pronotum: ♂ 3.2-3.4, ♀ 3.1; tegmina: ♂ 20-22, ♀ 20; hind femora: ♂ 13-13.5, ♀ 13.5; hind tibiae: ♂ 12.5-13, ♀ 13; distal inner spine of hind tibiae: ♂ 3.2-3.5, ♀ 3.1; hind metatarsi: ♂ 3.3-3.5, ♀ 3.2.

Comparison. The species is distinguished from all other similar species by the same characters as *T. buqueti*.

Trellius (Protrellius) buqueti (Audinet-Serville, 1839)
(Figs 25, 26, 35, 36)

Neotype (here designated). ♂ with labels: "Java", "ex coll. H. Dohrn", "*Heterotrypus buqueti* Serv.", "*Trellius (Protrellius) buqueti* (A.-Serv.) det. Gorochoy" (DEIE).

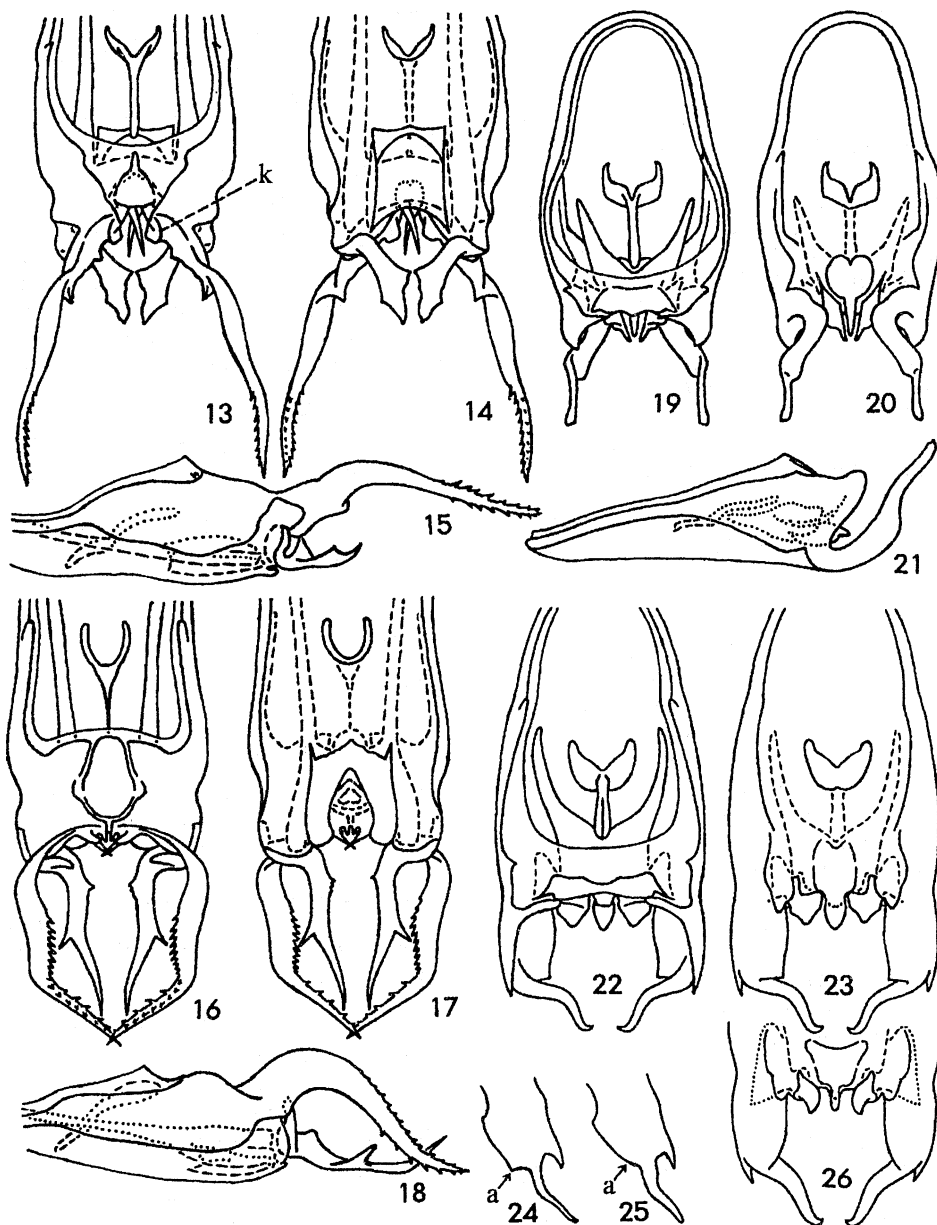
Note. The type material of this species from Java (originally described as a representative of the genus *Platydictylus*) is absent in National Natuurhistorisch Museum (Leiden) and MNHN. There are several very similar species from Java. It is impossible to differentiate them from each other using the old descriptions only. The detailed description of this specimen was published recently (Gorochoy, 1996: Figs 435, 447-449). It is necessary to add only two characters: anal plate with dark brown apex, lower edge of base of lower hind epiphallic processes with sloping round lobe (Fig. 25: a).

Trellius (Protrellius) suspectus sp. n.
(Figs 13-15)

Holotype. ♂, Thailand, prov. Surat Thani (central Malacca), 40 km WSW of Phanom, env. of Nat. park Khao Sok, primary forest, 20-29.VII.1996, A. Gorochoy (ZIAS).

Paratypes. 5 ♂, same data as holotype (ZIAS).

Description. Male (holotype). Similar to *T. siveci* Gor. (Gorochoy, 1996), but upper part



Figs 13-26. *Trellius*, ♂. 13-15, *T. suspectus* sp. n. (holotype); 16-18, *T. electus* sp. n. (holotype); 19-21, *T. perbonus* sp. n.; 22-24, *T. duplicatus* sp. n. (holotype); 25, 26, *T. buqueti* (A.-Serv.) (neotype). Genitalia from above (13, 16, 19, 22), from below (14, 17, 20, 23, 26), and from side (15, 18, 21); left hind part of epiphallus from side, slightly below, and slightly behind (24, 25).

of head brownish with dark brown rostrum and 4 longitudinal stripes, stridulatory vein slightly oblique, epiphallus of genitalia with less S-shaped hind paired processes, these processes without lobe at middle part, proximal part of these processes with 2 large me-

dial denticles (with 1 in *T. siveci*) and basal medial lobe separated by distinct upper keel (Fig. 13: k), upper median plate between left and right halves of epiphallus slightly larger, and paired spines under this plate slightly smaller.

Variation. Tegmina from distinctly pubescent to almost bare, with 8-11 oblique veins.

Female unknown.

Length (mm). Body 14.5-16.5; body with wings 27-30; pronotum 3-3.2; tegmina 18-20; hind femora 13-15; hind tibiae 13-14.5; distal inner spine of hind tibiae 3.4-3.6; hind metatarsi 3.5-3.7.

Comparison. *T. suspectus* is distinguished from all other similar species by the same characters as *T. siveci*.

Trellius (Protrellius) electus sp. n.

(Figs 16-18)

Holotype. ♂, **Malaysia**, Pahang (southern Malacca), Kuala Tahan near river Tembeling, env. of Nat. park Taman Negara, primary forest, 12-16.VII.1996, A. Gorochov (ZIAS).

Paratypes. 5 ♂, same data as holotype (ZIAS).

Description. Male (holotype). Similar to *T. helverseni* (Heller). Rather dark brown, but head with ornament as in previous species and legs spotted. Stridulatory vein long (its length equal to width of mirror), arched, and distinctly oblique. Abdominal apex as in previous species, but anal plate slightly broader; genitalia as in *T. helverseni*, but hind paired processes of epiphallus strongly curved in proximal half, ectoparameres with small proximal medial tooth and larger distal lateral one (excepting basal upper lobe), upper median plate between left and right halves of epiphallus slightly larger, and medial part of hind edge of both epiphallic halves (near above-mentioned plate) with 3 denticles (more or less spine-like).

Variation. Tegmina from distinctly pubescent to almost bare, with 7-9 oblique veins.

Female unknown.

Length (mm). Body 15-17; body with wings 28-31; pronotum 3.2-3.5; tegmina 19-21; hind femora 14.5-16; hind tibiae 14.2-15.5; distal inner spine of hind tibiae 3.6-3.8; hind metatarsi 3.6-3.8.

Comparison. The new species is distinguished from all other similar species by the same characters as *T. helverseni*.

Subgenus **Zatrellius** subgen. n.

Type species *Trellius (Zatrellius) communis* sp. n.

Diagnosis. The new subgenus differs from the subgenera *Trellius*, *Neotrellius*, and *Protrellius* in the male genitalia (Figs 33, 34) with left and right halves of epiphallus very broadly separated from each other (medial part of these halves membranized, only their

lateral part sclerotized), almost without mould of the spermatophore attachment plate (this plate reduced, only angular narrow stripe with apodeme remains), and with characteristic guiding rod (provided with a pair of very long curved processes at apex). The subgenus is distinguished from the nominotypical subgenus also by the normally developed guiding rod, ectoparameres, and endoparameral apodemes, and from *Neotrellius* by the moderate sized apodeme of the mould for attachment plate of spermatophore.

Included species: only type species.

Trellius (Zatrellius) communis sp. n.

(Figs 33, 34)

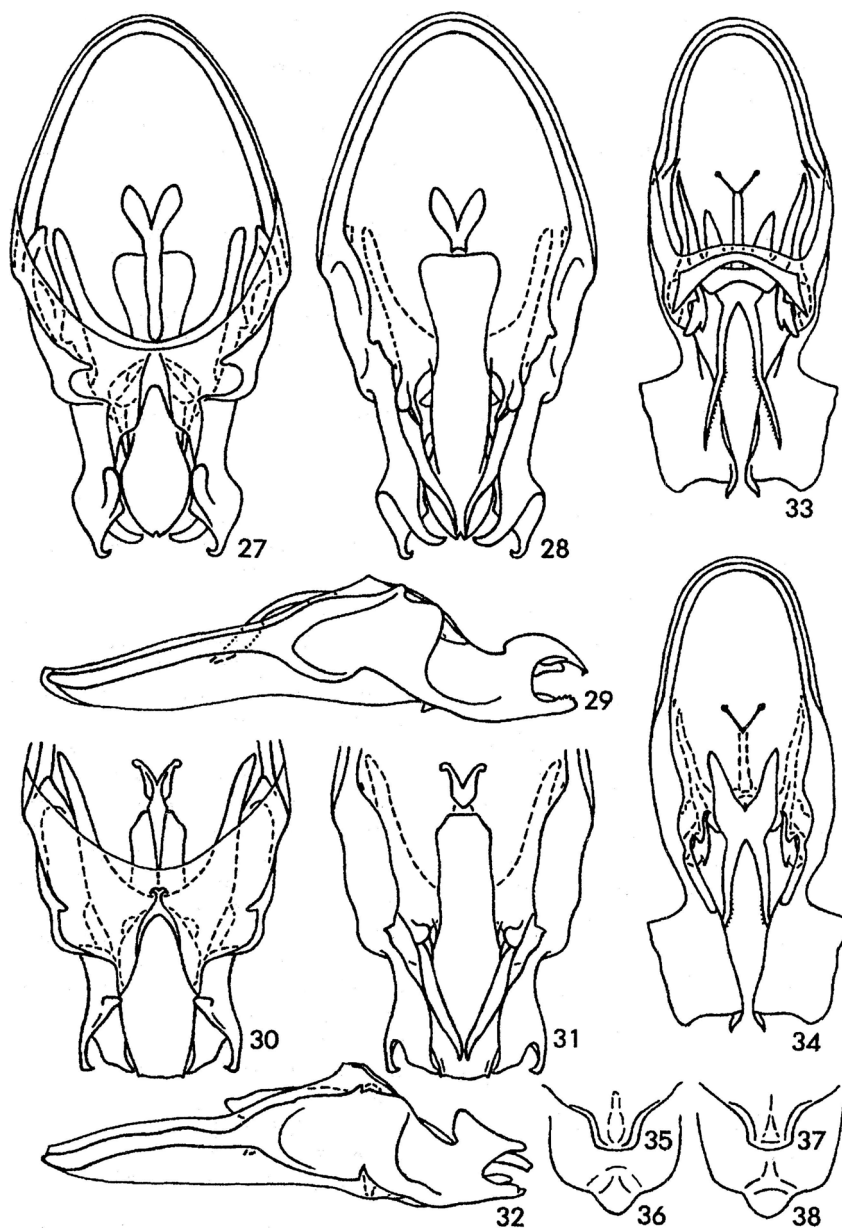
Holotype. ♂, **Thailand**, prov. Surat Thani (central Malacca), 40 km WSW of Phanom, env. of Nat. park Khao Sok, secondary forest, 20-29.VII.1996, A. Gorochov (ZIAS).

Paratypes. **Thailand:** 3 ♂, same data as holotype (ZIAS). **Cambodia:** 2 ♂, 2 ♀, prov. Campot, env. of Sihanoukville (= Kampong Som), secondary forest, 14-21.II. 1998, A. Gorochov (ZIAS).

Description. Male (holotype). Medium-sized, brownish, spotted. Rostrum between antennal cavities almost as wide as scape; head light brown with brown spots and stripes; antennae with lighter proximal part and slightly darker middle and distal parts; scape with darkish spot near apex; membrane of antennal cavities with darkening also. Pronotum brown with several dark brown spots on disc and longitudinal light spot near lower edge of lateral lobe. Tegmina light brown, partly translucent, slightly pubescent, with several darkened veins; mirror with 2 dividing veins well distant from each other; width of mirror hardly greater than its length; apical tegminal area long. Hind wings long (much longer than tegmina), with darkened (brownish grey) apical part. Legs spotted, rather light. Anal plate as in *T. siveci* and *T. suspectus*; genital plate with rounded apex; genitalia as in Figs 33, 34.

Variation. Some paratypes slightly darker (with almost dark brown disc), with more or less angular apex of genital plate, and with small angular lobe at middle of paired apical processes of guiding rod. Tegmina with 7-10 oblique veins.

Female. Similar to male in general appearance. Dorsal part of tegmina with 11-12 longitudinal veins and rather sparse regular transverse veinlets. Ovipositor rather short and with apex typical of this genus.



Figs 27-38. *Trellius*, ♂. 27-29, *T. excellens* sp. n. (holotype); 30-32, *T. fallens* sp. n.; 33, 34, *T. communis* sp. n. (holotype); 35, 36, *T. buqueti* (A.-Serv.) (neotype); 37, 38, *T. perbonus* sp. n. Genitalia from above (27, 30, 33), from below (28, 31, 34), and from side (29, 32); anal plate from above (35, 37); genital plate from below (36, 38).

Length (mm). Body: ♂ 13-16, ♀ 12-15; body with wings: ♂ 24-27, ♀ 24-28; pronotum: ♂ 2.7-2.9, ♀ 2.8-2.9; tegmina: ♂ 17-18.5, ♀ 16-18; hind femora: ♂ 12-13, ♀ 13.5-14.5; hind tibiae: ♂ 12-13.5, ♀ 13.5-14; distal inner spine of hind tibiae: ♂ 2.8-3.2, ♀ 3.1-3.6; hind metatarsi: ♂ 2.9-3.1, ♀ 2.8-3.1; ovipositor 5.5-6.5.

Subgenus **Vescelotrellius** subgen. n.

Type species *Trellius* (*Vescelotrellius*) *excellens* sp. n.

Diagnosis. Similar to *Zatrellius* in broadly separated lateral halves of epiphallus, but distinguished by normal mould for attachment plate of spermatophore, and absence of

long paired processes at apex of guiding rod. Differs from the subgenus *Trellius* in well developed guiding rod, ectoparameres, and endoparameral apodemes, from *Protrellius* in disappearance of medial parts of lateral epiphallal halves, and from *Neotrellius* in not very large apodeme of the mould for attachment plate of spermatophore.

Included species: type species and *T. (V.) fallens* sp. n.

***Trellius (Vescelotrellius) excellens* sp. n.**
(Figs 27-29)

Holotype. ♂, **Thailand**, prov. Phetchaburi (northern Malacca), 50-70 km SW of Phetchaburi, env. of Nat. park Kaeng Krachan near Burmese frontier, 800 m, primary forest, 1-3.VIII.1996, A. Gorochov (ZIAS).

Paratypes. 5 ♂, 1 ♀, same data as holotype (ZIAS).

Description. Male (holotype). Medium-sized, brown, spotted. Rostrum between antennal cavities approximately as wide as scape; head light brown with dark upper part, a pair of rather short vertical dark stripes on lower surface of rostrum, and indistinct darkish spots on genae; antennae brownish grey with indistinctly spotted scape. Pronotum uniformly dark brown. Tegmina brownish, slightly pubescent, with stridulatory vein and mirror typical of this genus; apical tegminal area long. Hind wings long (much longer than tegmina), with grey apical part. Legs spotted, with rather dark hind tibiae. Anal and genital plates as in *T. electus*; genitalia as in Figs 27-29.

Variation. Some paratypes slightly darker or lighter. Tegmina with 8-10 oblique veins.

Female. Similar to male in general appearance. Tegmina with 11 longitudinal veins and rather dense regular transverse veinlets. Ovipositor rather short and with apex typical of this genus.

Length (mm). Body: ♂ 15-17, ♀ 15; body with wings: ♂ 25-28, ♀ 26 mm; pronotum: ♂ 2.9-3.1, ♀ 3.2; tegmina: ♂ 18-20, ♀ 17; hind femora: ♂ 13.5-14.5, ♀ 14; hind tibiae: ♂ 13-14, ♀ 13.5; distal inner spine of hind tibiae: ♂ 3-3.3, ♀ 2.9; hind metatarsi: ♂ 3.2-3.5, ♀ 3.4; ovipositor 5.

***Trellius (Vescelotrellius) fallens* sp. n.**
(Figs 30-32)

Holotype. ♂, **Thailand**, prov. Surat Thani (central Malacca), 40 km WSW of Phanom, env. Nat. park Khao Sok, primary forest, 20-29.VII.1996, A. Gorochov (ZIAS).

Paratype. ♀, same data as holotype (ZIAS).

Description. Male (holotype). Similar to *T. excellens*, but distinguished by distinctly lighter coloration (with reddish brown tinge), tegmina with 7 oblique veins and slightly shorter apical area, genitalia with larger upper lobe at distal part of paired hind epiphallal processes, lower apical projection of these epiphallal processes broader, and apex of guiding rod almost truncated (not strongly narrowing) (for comparison see Figs 30-32).

Female. Similar to female of previous species, but upper part of head light reddish brown with 4 darkish longitudinal lines and ovipositor slightly shorter.

Length (mm). Body: ♂ 17, ♀ 14; body with wings: ♂ 24, ♀ 22.5; pronotum: ♂ 3, ♀ 3; tegmina: ♂ 18, ♀ 15.5; hind femora: ♂ 13.5, ♀ 12.8; hind tibiae: ♂ 13.5, ♀ 12.5; distal inner spine of hind tibiae: ♂ 2.7, ♀ 2.7; hind metatarsi: ♂ 3.2, ♀ 3.1; ovipositor 4.5.

Genus *Ceyloria* Gorochov, 1996

This genus is most closely related to the genus *Trellius*. It includes only 2 or 3 species from Sri Lanka and South India.

***Ceyloria vicina* (Chopard, 1928)**
(Figs 46-50)

Lectotype (here designated). ♂ with labels: "Woo-doide. Urugalla Ceylon. 25.IV.24", "Colombo Museum Ceylon", "*Heterotrypus vicinus* Chop. type L. Chopard det.", "Pres. by Imp. Bur. Ent. Brit. Mus. 1929-570", "Syntype" (BMNH).

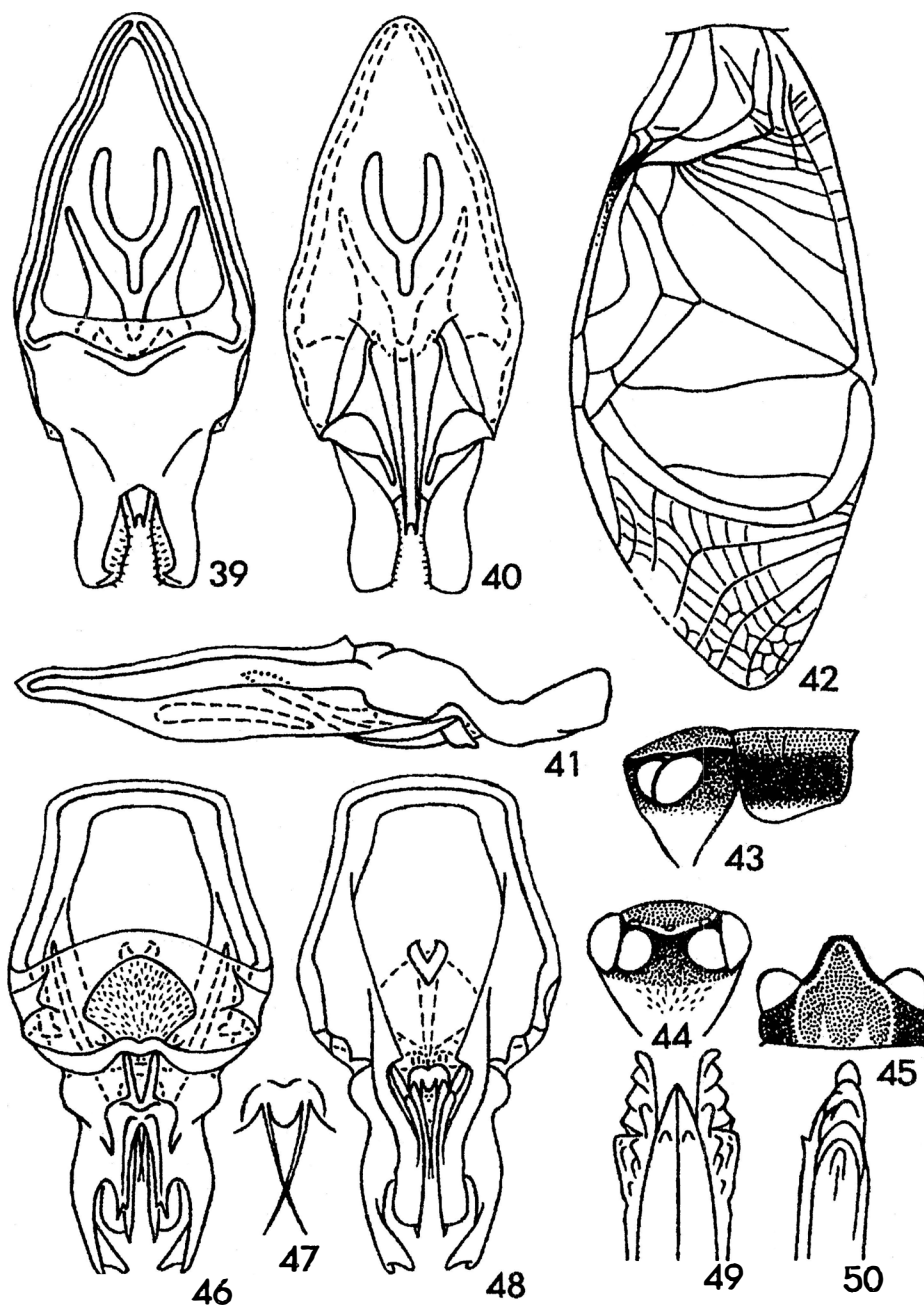
Paralectotype. **Sri Lanka**: 1 ♀, same labels as in lectotype (BMNH).

Other material. **India**: 1 ♂, southern Indostan (ZIAS).

Description. Male (lectotype). Very similar to *C. latissima* Gor. (Gorochov, 1996), but pronotum with a pair of lightish spots on disc and lightish spot on anteroinferior corner of both lateral lobes, tegmina with darkened basal area of dorsal part, genitalia with distinctly narrower lower hind processes of epiphallus, medial edge of these processes separated by membranous ribbon only in proximal half, guiding rod very short and with very long paired apical spines.

Variation. Specimen from India with almost uniformly dark brown pronotum and 9 oblique veins in tegmina.

Female. Similar to male in general appearance. Pronotum as in male from India. Tegmina darkened (brown), with 10 longitudinal veins at dorsal part and more or less dense regular transverse veinlets. Ovipositor



Figs 39-50. *Vescelia* and *Ceyloria*. 39-45, *V. moorei* (Chop.) (holotype); 46-50, *C. vicina* (Chop.) (46-48, lectotype). Male genitalia from above (39, 46), from below (40, 48), and from side (41); dorsal part of male tegmina (42); head and pronotum from side (43); head in front (44) and from above (45); guiding rod of male genitalia from below (47); apex of ovipositor from below (49) and from side (50).

short, with apex similar to that of *Trellius* (Figs 49, 50).

Length (mm). Body: ♂ 17-19, ♀ 16.5; body with wings: ♂ 23-26, ♀ 27; pronotum: ♂ 3-3.2, ♀ 3; tegmina: ♂ 18-20, ♀ 18.5; hind femora: ♂ 13.5-14.5, ♀ 14; hind tibiae: ♂ 13-14, ♀ 13; distal inner spine of hind tibiae: ♂ 3.2-3.8, ♀ 3.2; hind metatarsi: ♂ 3-3.3, ♀ 3; ovipositor 4.5.

Genus *Vescelia* Stål, 1877

The genus consists of 2 groups of species including 2-3 and 1 species respectively (Gorochov, 1996). *Heterotrypus moorei* Chop. is added to *Vescelia* here, but it occupies an intermediate position between the above-mentioned groups.

***Vescelia moorei* (Chopard, 1940), comb. n.**
(Figs 39-45, 164, 165)

Heterotrypus moorei Chopard, 1940.

Holotype. ♂, **Malaysia, Kalimantan**, "Sarawak, foot of Mt. Dulit, junction of river Tinjar & Lejok, traps. 1", 11.IX.1932, Oxford Univ. Exp. B.M. Hobby & A.W. Moore (BMNH).

Description. Male (holotype). Comparatively small, brownish (all legs missing). Head rather low, with light brown, brown, dark brown, and black areas (see Figs 43-45); antennae brown; mouthparts lightish. Pronotum distinctly narrowing in front, with dark brown, brown, and light brown areas (Fig. 43). Tegmina yellowish (almost translucent) with brown spot on anterosuperior corner of lateral parts and on base of basal area of dorsal part; lateral part of tegmina with 21-22 branches of *Sc* and wide area between *R* and *M*. Hind wings much longer than tegmina, with brownish apical part. Abdomen with brown tergites and light brown sternites; anal and genital plates as in Figs 164, 165; genitalia as in Figs 39-41.

Female unknown.

Length (mm). Body 12.5; body with wings 19.5; pronotum 2.4; tegmina 12.7.

Genus *Phaloria* Stål, 1877

This genus consists of 3 subgenera: *Phaloria* s. str. with 5-6 species, *Papuloria* Gorochov, 1996 with 23-27 species, and *Trelloria* Gorochov, 1996 with 2 species.

***Phaloria (Phaloria) quasipuria* sp. n.**
(Figs 51-56, 131)

Holotype. ♂, **Solomon Is, Guadalcanal I.**, "Popomanasiu, Hunuvalehama, on tree trunks around camp", XI.1965, Roy. Soc. Exped. (BMNH).

Description. Male (holotype). Rather large, brown, spotted. Head dark brown with slightly lighter (brown) base of mandibles, subgenae, part of genae near mandibles, palpi, antennae (excepting inner half of scapes), and a pair of longitudinal stripes behind eyes; rostrum between antennal cavities about 0.7 times as wide as scape. Pronotum distinctly narrowing in front; disc and upper halves of lateral lobes dark brown, but lower halves of these lobes lighter, brown or almost light brown. Tegmina with wide area between *R* and *M*; dorsal part of tegmina greyish brown; lateral part of tegmina light brown with darkish veins; this lateral part with 26-27 branches of *Sc*. Hind wings darkened (their distal parts destroyed). Legs brown with distinct dark spots; both tympana of fore tibiae rather small and almost round; spines of hind tibiae short. Abdomen brown or almost light brown; anal and genital plate as in Figs 55, 56; genitalia as in Figs 51-54.

Female unknown.

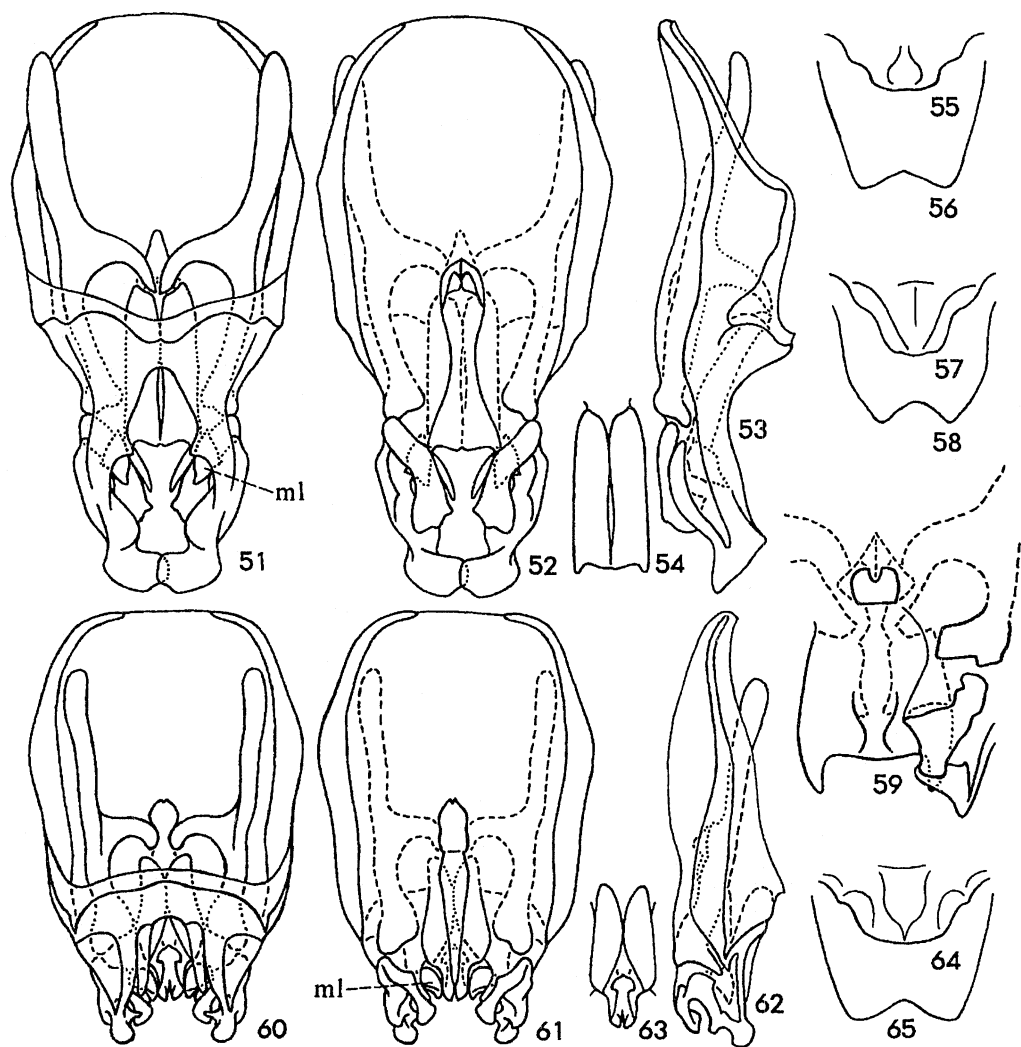
Length (mm). Body 22; pronotum 3.6; tegmina 19.5; hind femora 13.8; hind tibiae 12.5; distal inner spine of hind tibiae 1.2; hind metatarsi 2.8.

Comparison. The new species is slightly similar to *Ph. amplipennis* Stål in the general shape of the male genitalia, but distinguished by the characteristic coloration, narrow rostrum of head, different shape of ectoparameres and mould of the spermatophore attachment plate, and partly concealed paired medial lobes of epiphallus (Fig. 51: ml). It differs from other species of this subgenus in the general shape of the male genitalia as well as coloration and width of rostrum.

***Phaloria (Phaloria) heterotrypoides* sp. n.**
(Figs 60-65, 138)

Holotype. ♂, **Fiji, Viti Levu I.**, "Lautoka" (ZIAS).

Description. Male (holotype). Medium-sized, light brown. Head light brown with slight darkish ornament similar to that of *Ph. vulgata* Gor. (Gorochov, 1996: Figs 267, 268), but with darkened median part of clypeus, lighter upper part of rostrum, and indistinct lower parts of frontal darkish stripes. Pronotum distinctly narrowing in front, brownish with lighter a pair of large spots on disc and narrow longitudinal spot on lateral lobes. Tegmina almost yellowish with brownish elongated spots along stridulatory vein, along diagonal vein and costal part of



Figs 51-65. *Phaloria*, ♂. 51-56, *Ph. quasispuria* sp. n.; 57-59, *Ph. insularis karnyi* (Chop.); 60-65, *Ph. heterotrypoides* sp. n. Genitalia from above (51, 60), from below (52, 61), and from side (53, 62); guiding rod from above (54, 63) and from below, but with mould of the spermatophore attachment plate, proximal part of endoparameres, right ectoparamere, and apex of right hind lateral lobe of epiphallus (59); distal part of anal (55, 57, 64) and genital (56, 58, 65) plates from above.

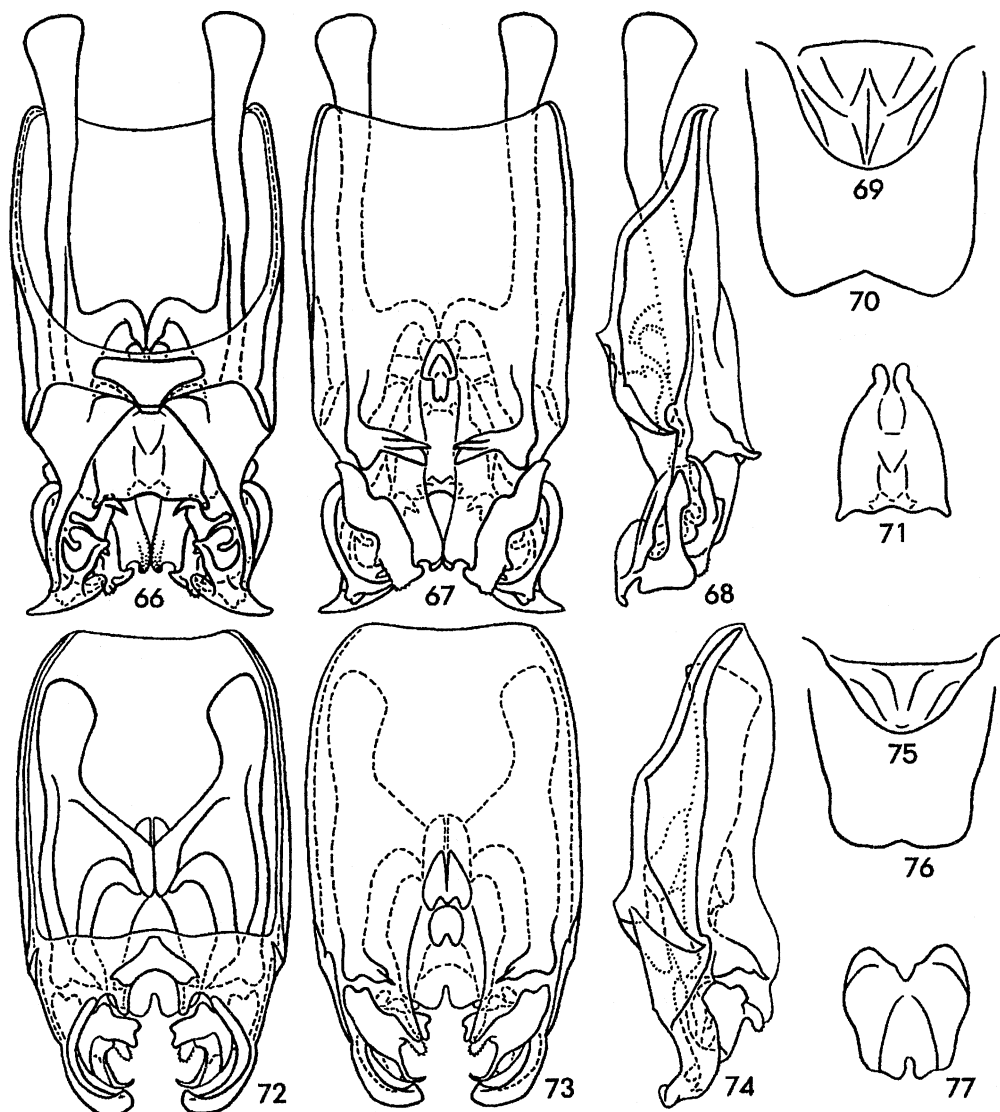
proximal edge of mirror, and along distal edge of mirror; lateral part of tegmina with 22-23 branches of *Sc*; *R-M* area wide. Hind wings light, hardly shorter than tegmina. Legs uniformly light brown; fore tibiae with oval medium-sized inner tympanum and rather small elongated outer one (hind legs missing). Abdomen light brown with slightly darker genital plate; shape of anal and geni-

tal plates as in Figs 64, 65; genitalia as in Figs 60-63.

Female unknown.

Length (mm). Body 15.5; pronotum 3; tegmina 13.5.

Comparison. The new species is similar to *Ph. amplipennis* in general appearance, but distinguished from it as well as from all other species of this subgenus by the peculi-



Figs 66-77. *Phaloria*, ♂. 66-71, *Ph. aphana* sp. n.; 72-77, *Ph. aperta* sp. n. Genitalia from above (66, 72), from below (67, 73), and from side (68, 74); distal part of anal (69, 75) and genital (70, 76) plates from above; guiding rod from above (71, 77).

arities of coloration and shape of the male genitalia (especially by guiding rod and mould of the spermatophore attachment plate almost united with each other).

Phaloria (Phaloria) insularis insularis (Bolívar, 1912), stat. n.

Paralectotypes. Seychelles: 2 ♂, Mahe I., 1908-1909, Seychelles Exp. (BMNH); 2 ♂, Silhouette I., 1908, Seychelles Exp. (BMNH).

Note. This subspecies was described from Seychelles as a separate species. It is characterized by almost uniformly light brown male tegmina. The redescription of the lectotype (male) recently published by me contains a small mistake in the drawings of its genitalia (Gorochoy, 1996: Figs 361-364). In reality the hind medial process of endoparameres is fused with the sclerites of guiding rod as is figured for the second subspecies (Fig. 59).

Phaloria (Phaloria) insularis karnyi (Chopard, 1929), stat. n.
(Figs 57-59)

Syntype. ♂, Indonesia, Mentawai Is., Sipora I., "170", 10.X.1924, H.H. Karny (MNHN).

Material. 3 ♂, Indonesia, Java, K. Fruhstorfer S. (MIZP and ZIAS).

Diagnosis. Differs from the nominotypical subspecies only in more or less spotted coloration of dorsal part of male tegmina: light brown with darkish (brown) elongated spots along stridulatory vein, diagonal vein, lateral (costal) part of proximal edge of mirror, and distal edge of mirror.

Phaloria (Papuloria) aphana sp. n.
(Figs 66-71, 141, 145, 146)

Holotype. ♂, Solomon Is, San Cristoval I., "Cristoval, Camp 2", 25.VII.1965, Roy. Soc. Exped. (BMNH).

Paratypes. Solomon Is: 1 ♀, same data as holotype (BMNH); 1 ♂, Malaita I., "Baunani", 6.IX.1954, E.S. Brown (BMNH); 1 ♂, Malaita I., 1965, Roy. Soc. Exped. (ZIAS).

Description. Male (holotype). Large, brownish, very slightly spotted. Head intermediate between brown and light brown with darkened labrum, almost indistinct short longitudinal light brown spots on vertex, and almost yellowish antennae and palpi; rostrum between antennal cavities 0.67 times as wide as scape. Pronotum distinctly narrowing in front, brown with slightly lighter transverse spot on disc and light brown narrow spot along lower edge of lateral lobes. Tegmina with rather wide *R-M* area; their lateral part with 25-27 branches of *Sc*, yellowish with brownish veins; dorsal part light brown with slightly darker veins. Hind wings darkish, almost as long as tegmina. Fore and middle legs almost uniformly light brown, but second segment of their tarsi darkened; hind legs light brown with very slight darkish spots only on inner side; fore tibiae with rather large elongated inner tympanum and distinctly smaller oval outer tympanum; spines of hind tibiae rather short. Abdomen light brown; anal and genital plates as in Figs 69, 70; genitalia as in Figs 66-68, 71.

Variation. Paratypes lighter and with slightly asymmetrical distal part of genitalia.

Female. More or less similar to male, but slightly darker. Dorsal part of tegmina with 10-11 longitudinal oblique veins and rather numerous transverse veinlets; lateral part of

tegmina with 15-16 branches of *Sc*. Ovipositor long; its apex as in Figs 145, 146.

Length (mm). Body: ♂ 22-25, ♀ 21; body with wings: ♂ 28-30, ♀ 30; pronotum: ♂ 3.9-4.1, ♀ 4.2; tegmina: ♂ 22-24, ♀ 21; hind femora: ♂ 18-19, ♀ 19; hind tibiae: ♂ 17-18, ♀ 18; distal inner spine of hind tibiae: ♂ 1.8-2, ♀ 1.9; hind metatarsi: ♂ 3.5-3.7, ♀ 3.8; ovipositor 20.

Comparison. This new species is similar to *Ph. mimula* (Krauss), but larger and coloration of head almost uniform. It differs from other species of the subgenus *Papuloria* in the almost uniform coloration, large size, elongated male tegmina, very characteristic male genitalia, and long ovipositor.

Phaloria (Papuloria) aperta sp. n.
(Figs 72-77, 134)

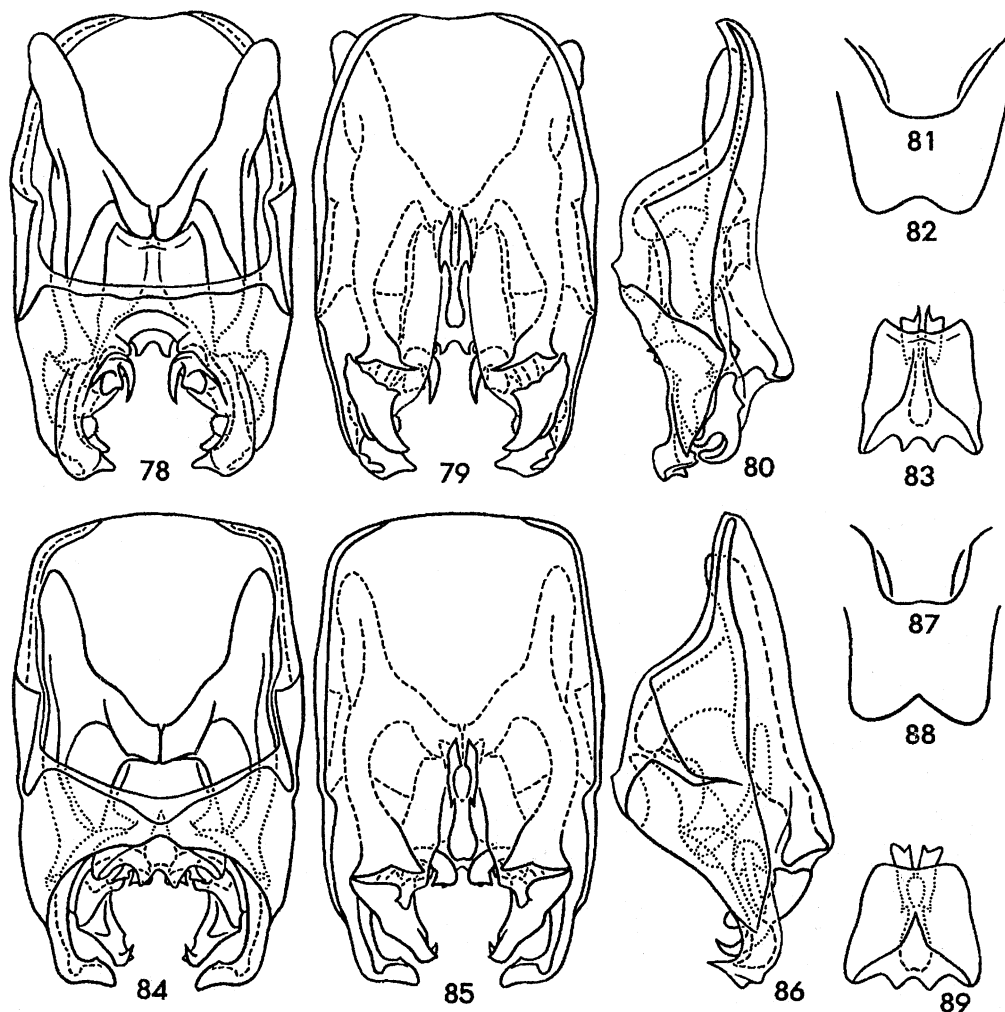
Holotype. ♂, Solomon Is, Kolombangara I. (near New Georgia I.), "Camp 1, Aica 2500", 12.X.1933, H.T. Pagden (BMNH).

Description. Male (holotype). Medium-sized, brownish, spotted. Head light brown with almost indistinct slightly darkish spots; antennae brownish, their flagellum with slightly lighter proximal part and brown middle and distal parts; palpi brownish with almost dark brown apex; rostrum between antennal cavities almost as wide as scape. Pronotum distinctly narrowing in front, brown with several light brown spots on disc and 2 light brown spots on lower half of lateral lobes. Tegmina with rather wide *R-M* area; lateral tegminal part with 28 branches of *Sc*, almost transparent with brownish veins; dorsal tegminal part uniformly light brown. Hind wings darkish, much longer than tegmina. Fore and middle legs light brown with distinct dark brown spots; hind legs light brown with slightly distinct brown spots; spines of hind tibiae long (fore legs missing). Abdomen light brown; anal and genital plates as in Figs 75, 76; genitalia as in Figs 72-74, 77.

Female unknown.

Length (mm). Body 17; body with wings 28; pronotum 2.7; tegmina 19; hind femora 12.5; hind tibiae 11.8; distal inner spine of hind tibiae 2.8; hind metatarsi 3.2.

Comparison. The species is slightly similar to *Ph. aphana*, but smaller, coloration more spotted, hind wings longer, and genitalia very different. From all other species of this subgenus it differs distinctly in the peculiarities of the male tegminal venation and male genitalia.



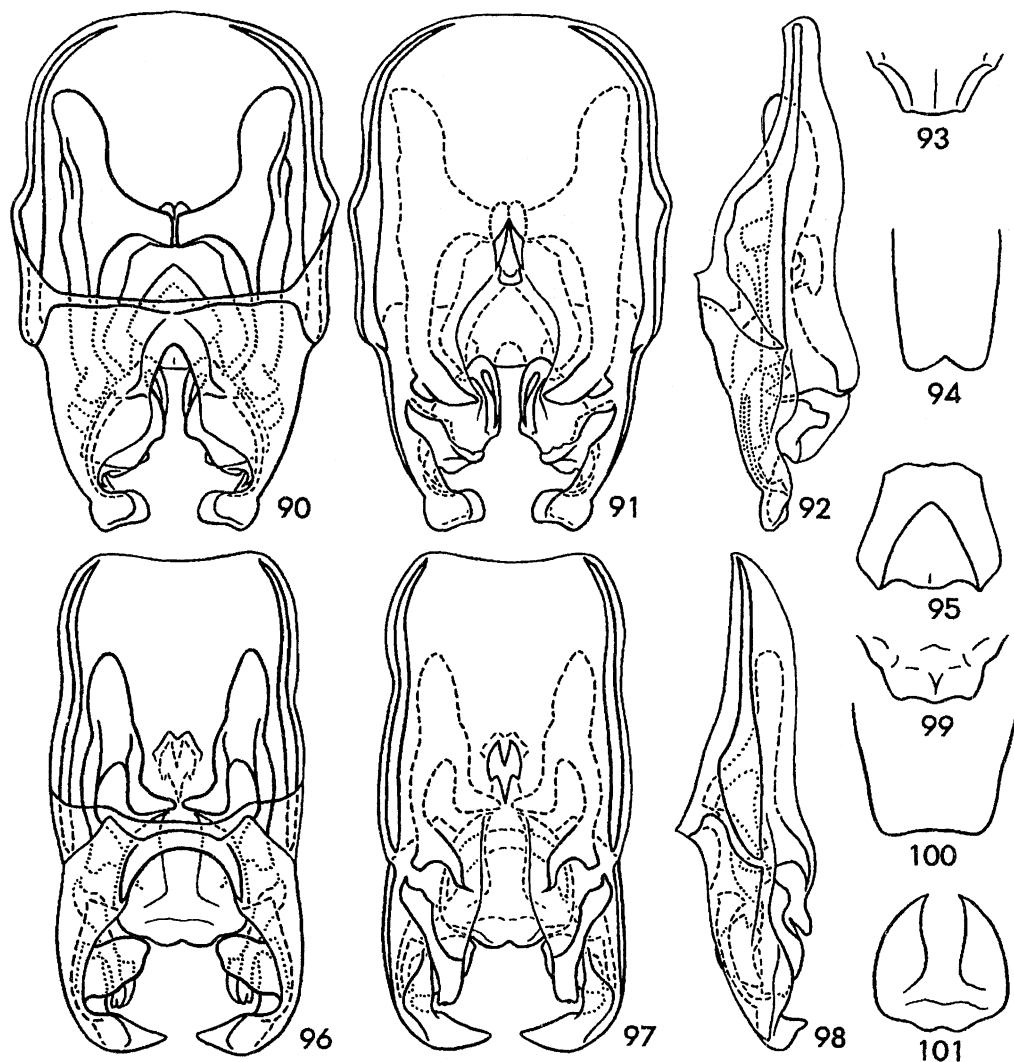
Figs 78-89. *Phaloria*, ♂. 78-83, *Ph. inventa* sp. n.; 84-89, *Ph. offensa* sp. n. Genitalia from above (78, 84), from below (79, 85), and from side (80, 86); distal part of anal (81, 87) and genital (82, 88) plates from above; guiding rod and mould of the spermatophore attachment plate from above (83, 89).

***Phaloria (Papuloria) inventa* sp. n.**
(Figs 78-83, 139)

Holotype. ♂, Solomon Is, Kolombangara I. (near New Georgia I.), "Kolombara River, Camp I, 1 ml. inland from Kuzi", 8.IX.1965, Roy. Soc. Exped. (BMNH).

Description. Male (holotype). Rather small, brownish, spotted. Head brown with almost indistinct lighter spots on vertex, light brown mouthparts and palpi (with slightly darkened distal part), and almost dark brown middle and distal parts of antennal flagellum; rostrum between antennal cavities almost as wide as scape. Pronotum

distinctly narrowing in front, dark brown with several light brown and yellowish spots on disc and 2 yellowish spots on lower half of lateral lobes (these spots connected with each other by narrow light stripe). Tegmina with rather wide *R-M* area; their lateral part with 24 branches of *Sc*, almost transparent with brown veins; dorsal part light brown with darkening along stridulatory vein. Hind wings darkish distally, much longer than tegmina. Legs light brown with distinct dark brown spots; fore tibiae with rather large elongated inner tympanum and smaller oval outer tympanum; spines of hind tibiae long. Abdomen light brown; anal and genital



Figs 90-101. *Phaloria*, ♂. 90-95, *Ph. browni* sp. n.; 96-101, *Ph. ostensa* sp. n. Genitalia from above (90, 96), from below (91, 97), and from side (92, 98); distal part of anal (93, 99) and genital (94, 100) plates from above; guiding rod from above (95, 101).

plates as in Figs 81, 82; genitalia as in Figs 78-80, 83.

Female unknown.

Length (mm). Body 15; body with wings 24; pronotum 2.3; tegmina 17; hind femora 10.7; hind tibiae 10; distal inner spine of hind tibiae 3.1; hind metatarsi 2.8.

Comparison. *Ph. inventa* is similar to *Ph. aperta*, but distinguished from it and from all other species of this subgenus by the size and the male genitalia with strong hooks near the apex of guiding rod.

***Phaloria (Papuloria) offensa* sp. n.**
(Figs 84-89, 140, 151, 152)

Holotype. ♂, Vanuatu (New Hebrides), Banks Is, Vanua Lava I., XI.1929, L.E. Cheesman (BMNH).

Paratype. ♀, Vanuatu (New Hebrides), Malekula I., II.1930, L.E. Cheesman (BMNH).

Description. Male (holotype). Similar to *Ph. inventa*, but front and genae of head light brown with brown spots, palpi and antennae almost uniformly light brown, dorsal part of tegmina as in Fig. 140, tegminal lat-

eral part with light brownish veins, upper half of abdomen brown, anal and genital plates as in Figs 87, 88, and genitalia as in Figs 84-86, 89 (legs missing).

Female. Similar to male, but slightly darker (especially antennae), veins of tegmina darkish, and upper part of abdomen lighter. Legs light brown with distinct dark brown spots; fore tibiae with rather large oval inner and slightly smaller oval outer tympana; hind tibiae with long spines. Dorsal part of tegmina with 11 longitudinal oblique veins and rather sparse transverse veinlets; their lateral part with 14-15 branches of *Sc*. Ovipositor short; its apex as in Figs 151, 152.

Length (mm). Body: ♂ 13, ♀ 13; body with wings: ♂ 22, ♀ 22; pronotum: ♂ 2.1, ♀ 2; tegmina: ♂ 16, ♀ 15; hind femora in ♀ 9.7; hind tibiae in ♀ 8.8; distal inner spine of hind tibiae in ♀ 2.8; hind metatarsi in ♀ 2.5; ovipositor 4.2.

Comparison. The new species differs from all species of this subgenus in the size, coloration, long spines of hind tibiae, peculiarities of the male genitalia, and short ovipositor.

***Phaloria (Papuloria) browni* sp. n.**

(Figs 90-95, 137, 153, 154)

Holotype. ♂, Solomon Is, Guadalcanal I., "Honiara district, Poba Ruves", 25.VII.1954, E.S. Brown (BMNH).

Paratype. ♀, Solomon Is, Guadalcanal I., "Sulakiki R.", 27.VI.1956, E.S. Brown (BMNH).

Description. Male (holotype). Similar to *Ph. inventa* and *Ph. offensa*, but coloration of head as in *Ph. offensa* (except antennal flagellum which is brown with light brown basal part), pronotum, legs, and coloration of tegmina and abdomen as in *Ph. inventa*. Dorsal part of tegmina as in Fig. 137. Anal and genital plates as in Figs 93, 94; genitalia as in Figs 90-92, 95.

Female. As male, but slightly lighter. Dorsal part of tegmina with 10-11 longitudinal oblique veins and rather numerous transverse veinlets; tegminal lateral part and ovipositor similar to those of *Ph. offensa*, but apical projections of lower valvae of ovipositor somewhat shorter (Figs 153, 154).

Length (mm). Body: ♂ 13, ♀ 14; body with wings: ♂ 22.5, ♀ 24; pronotum: ♂ 2.3, ♀ 2.3; tegmina: ♂ 15, ♀ 16; hind femora: ♂ 10.3, ♀ 10; hind tibiae: ♂ 9.7, ♀ 9.6; distal inner spine of hind tibiae: ♂ 2.8, ♀ 2.7; hind metatarsi: ♂ 2.6, ♀ 2.5; ovipositor 4.2.

Comparison. The new species differs from all species of this subgenus in the peculiarities of the male genitalia and also in the same characters as *Ph. inventa* and *Ph. offensa*.

***Phaloria (Papuloria) ostensa* sp. n.**

(Figs 96-101, 135)

Holotype. ♂, Papua – New Guinea, northern New Guinea, "Torecella Mt., Afua, 50-100 ft.", 2.IV.1939, G.P. Moore (BMNH).

Description. Male (holotype). Rather small, brownish grey, spotted. Lower part of head light brown with slight small brown spots; upper part of head brownish grey with almost indistinct lighter spots; palpi and proximal half of antennae light brown; rest of antennae brown; rostrum between antennal cavities almost as wide as scape. Pronotum distinctly narrowing in front, dark brown with light brown spots on disc and lower half of lateral lobes. Tegmina with rather wide *R-M* area and 21-22 branches of *Sc*; dorsal part of tegmina brownish grey with darkenings on basal area and along stridulatory vein; lateral part of tegmina almost transparent with darkened veins. Hind wings darkish distally, much longer than tegmina. Legs light brown with dark brown spots; fore tibiae with medium-sized elongated inner tympanum and slightly smaller oval outer tympanum; spines of hind tibiae long. Abdomen with brown upper part and light brown lower part; cerci brownish; anal and genital plates as in Figs 99, 100; genitalia as in Figs 96-98, 101.

Female unknown.

Length (mm). Body 12; body with wings 22; pronotum 2; tegmina 14.5; hind femora 10.2; hind tibiae 10; distal inner spine of hind tibiae 2.8; hind metatarsi 2.5.

Comparison. The new species is similar to *Ph. inventa*, *Ph. offensa*, and *Ph. browni*, but distinguished from them and from all other species of this subgenus by the narrow dorsal part of the male tegmina and characteristic male genitalia.

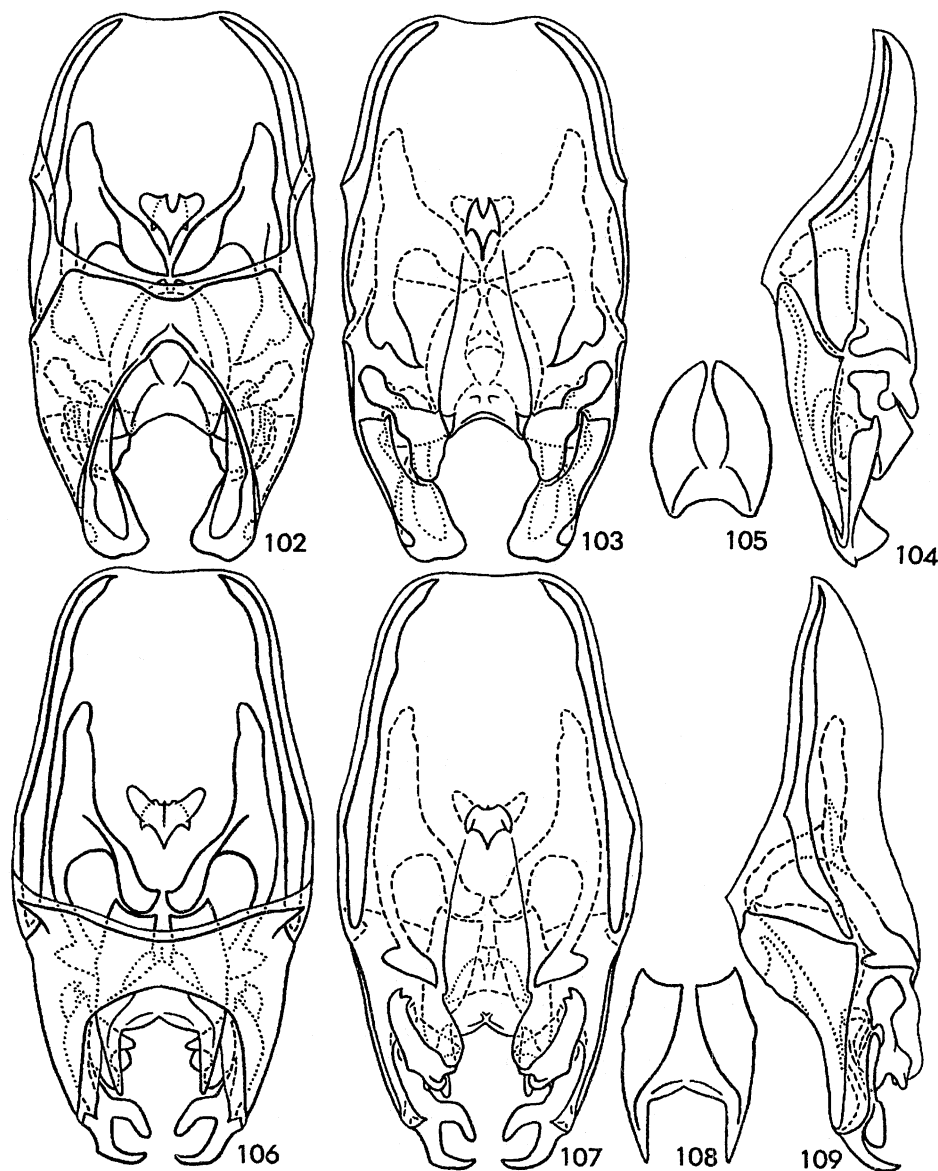
***Phaloria (Papuloria) harzi* sp. n.**

(Figs 102-105, 142)

Holotype. ♂, Indonesia, northern New Guinea, "Kyklop Be." (ZIAS).

Paratypes. 1 ♂, 1 ♀, same data as holotype (ZIAS).

Description. Male (holotype). Medium-sized, brownish grey, spotted. Coloration of head similar to that of *Ph. ostensa*, but



Figs 102-109. *Phaloria*, ♂. 102-105, *Ph. harzi* sp. n.; 106-109, *Ph. pareximia* sp. n. Genitalia from above (102, 106), from below (103, 107), and from side (104, 109); guiding rod from above (105, 108).

slightly darker; rostrum between antennal cavities almost as wide as scape. Pronotum distinctly narrowing in front, dark brown with very small lightish spots on disc and lateral lobes. Tegmina with rather wide *R-M* area and 24 branches of *Sc*; coloration of tegmina as in *Ph. ostensa*. Hind wings, legs, and abdomen also as in *Ph. ostensa*, but genitalia as in Figs 102-105.

Variation. Pronotum with rather large light spots on disc.

Female. As male, but coloration of pronotum intermediate between those of above-mentioned males. Dorsal part of tegmina with 10-11 longitudinal oblique veins and numerous transverse veinlets; lateral part of tegmina with 15 branches of *Sc*. Ovipositor similar to that of *Ph. offensa*, but longer.

Length (mm). Body: ♂ 15.5, ♀ 14.5; body with wings: ♂ 27-29, ♀ 29; pronotum: ♂ 2.6-2.8, ♀ 2.7; tegmina: ♂ 18-19, ♀ 19; hind femora: ♂ 12, ♀ 12.7; hind tibiae: ♂ 11-11.2, ♀ 12; distal inner spine of hind tibiae: ♂ 3-3.2, ♀ 3.5; hind metatarsi: ♂ 2.7-2.8, ♀ 2.9; ovipositor 6.7.

Comparison. *Ph. harzi* is similar to *Ph. ostensa*, but differs from it and from all other species of this subgenus in the peculiarities of the male genitalia (especially in short endoparameral apodemes).

Etymology. This species is named in memory of the well-known orthopterist Dr. K. Harz.

Phaloria (Papuloria) pareximia sp. n.

(Figs 106-109, 144)

Holotype. ♂, Indonesia, northern New Guinea, "Kyklop Be." (ZIAS).

Paratype. ♀, same data as holotype (ZIAS).

Description. Male (holotype). Rather small, brownish grey, spotted. Upper part of head greyish brown with light brown spot behind eyes and indistinct ornament between antennal cavities in front (median darkish spot and a pair of lateral lightish vertical bands); lower part of head light brown with a pair of dark brown spots (on hind part of genae) and 4 indistinct darkish spots between them; palpi and proximal part of antennae brownish; middle and distal parts of antennae greyish brown; rostrum between antennal cavities slightly wider than scape. Pronotum distinctly narrowing in front, dark brown with unpaired transverse light brown spot on disc (shape of this spot rather complicated) and 2 lightish small spots on each of the lateral lobes (not far from lower edge of these lobes). Tegmina with rather wide *R-M* area and 21-23 branches of *Sc*; coloration of tegmina brownish grey, almost uniform, but with darkening along medial (anal) 2/3 of stridulatory vein; venation of dorsal part as in Fig. 144. Hind wings darkish distally, much longer than tegmina. Legs spotted (light brown with dark brown); fore tibiae with tympana as in *Ph. ostensa*; spines of hind tibiae medium-sized. Abdomen uniformly brownish; anal and genital plates as in *Ph. ostensa*, but apex of anal plate round and apex of genital plate truncated; genitalia as in Figs 106-109.

Female. Similar to male, but slightly darker and with slightly larger 2 lightish spots on each of the pronotal lateral lobes. Dorsal part of tegmina with rather numerous transverse veinlets (apical part of tegmina and hind wings destroyed); lateral part

of tegmina with 13-14 branches of *Sc*. Ovipositor similar to that of *Ph. harzi*.

Length (mm). Body: ♂ 13.5, ♀ 12.5; body with wings in ♂ 23.5; pronotum: ♂ 2.6, ♀ 2.6; tegmina in ♂ 15.8; hind femora: ♂ 11.8, ♀ 12; hind tibiae: ♂ 11.2, ♀ 11.3; distal inner spine of hind tibiae: ♂ 2.3, ♀ 2.3; hind metatarsi: ♂ 3.1, ♀ 3; ovipositor 7.3.

Comparison. The new species is very similar to *Ph. eximia* Gor. (see Gorochov, 1996), but differs in the peculiarities of the male genitalia: epiphallus with distinctly more deeply bifurcated hind lateral processes, ectoparameres without characteristic spine-like projection, guiding rod with only angular median notch between its long hind lateral processes, mould of the spermatophore attachment plate with larger apodemes.

Phaloria (Papuloria) pararava sp. n.

(Figs 110-115, 143)

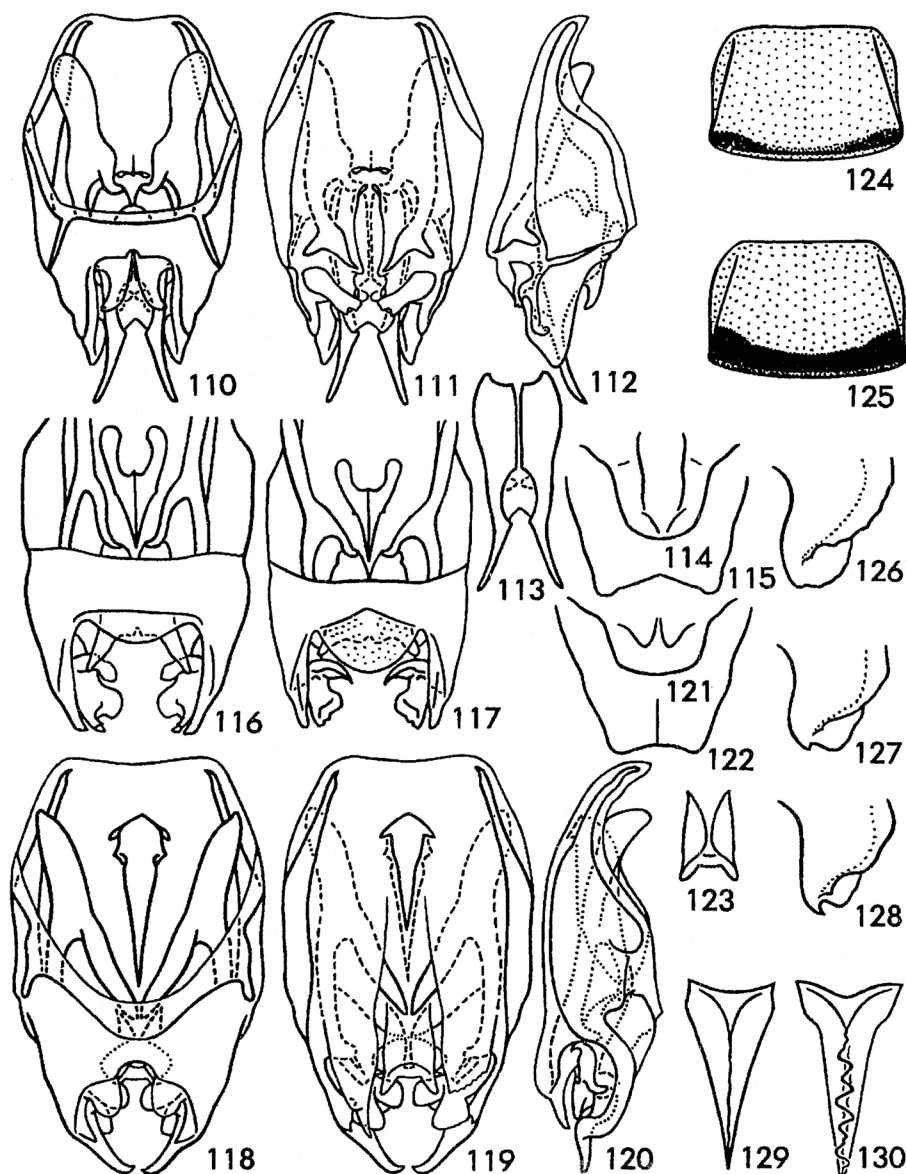
Holotype. ♂, Papua – New Guinea, southern New Guinea, "Papua, Kokoda, 1200 ft.", VIII.1933, L.E. Cheesman (BMNH).

Description. Male (holotype). Medium-sized, more or less uniformly brownish. Upper hind part of head uniformly brown, but lower fore part of head light brown (border between these parts runs across base of upper part of rostrum to eyes and obliquely from eyes to hind lower corner of genae); rostrum between antennal cavities slightly narrower than scape. Pronotum distinctly narrowing in front, uniformly brown (rather dark). Tegmina with rather wide *R-M* area and 27-28 branches of *Sc*, brownish with slightly darker basal area of dorsal part and slightly lighter mirror and lateral part (dorsal part with brown veins and lateral one with scarcely lighter veins); venation of dorsal part as in Fig. 143. Hind wings much longer than tegmina, brownish. Legs almost uniformly brownish: light brown with slight darkenings at base of fore tibiae and near base of spines and spurs of hind tibiae (middle legs missing); fore tibiae with medium-sized elongated inner tympanum and distinctly smaller oval outer tympanum; spines of hind tibiae short. Abdomen brownish, rather light; anal and genital plates as in Figs 114-115; genitalia as in Figs 110-113.

Female unknown.

Length (mm). Body 20; body with wings 26; pronotum 3.8; tegmina 17.3; hind femora 14.9; hind tibiae 14.3; distal inner spine of hind tibiae 1.2-1.4; hind metatarsi 3.2.

Comparison. The new species is very similar to *Ph. rava* Gor. in the shape of the male genitalia (see Gorochov, 1996: Figs 385-



Figs 110-130. *Phaloria*, ♂. 110-115, *Ph. pararava* sp. n.; 116, *Ph. similis* Chop. (holotype); 117, *Ph. parasimilis* sp. n. (holotype); 118-123, *Ph. popovi* sp. n.; 124-126, *Ph. solomonica cristoval* subsp. n. (124, Ugi I.; 125, holotype); 127, *Ph. s. vanuatu* subsp. n. (holotype); 128, 129, *Ph. s. solomonica* Gor. (holotype); 130, *Ph. s. novageorgia* subsp. n. (holotype). Genitalia from above [110, 116, 117, 118 (116, 117, without proximal part)], from below (111, 119), and from side (112, 120); guiding rod from above (113, 123); anal (114, 121) and genital (115, 122) plates from above; pronotum from above (124, 125); distal part of ectoparameres from below (126-128); mould of the spermatophore attachment plate from above (129, 130).

388), but distinguished markedly by the characteristic coloration (without any transverse bands on head and pronotum), wider mirror and shorter apical area of male tegmina, and distinctly larger hind lateral part of endoparameres.

***Phaloria* (*Papuloria*) *similis* Chopard, 1968**
(Fig. 116)

Holotype. ♂, **Papua – New Guinea**, “N. Guinea, Biro, 97, Erima, Astrolabe B.”, “*Heterotrypus similis* Chop., Type” (MNHN).

Note. This specimen is very similar to the specimens which were recently determined by me as this species (see description of "*Ph. similis*" in Gorochov, 1996), but its male genitalia are slightly different: median sclerotized part of epiphallus wider and with straight hind edge (with angular hind edge in my specimens), distal lateral processes of guiding rod longer, apical projection of ectoparameres hook-like and with 2 points (not hook-like and without points in my specimens), subapical medial lobe of ectoparameres distinctly larger, and proximal medial ectoparameral lobe slightly smaller, shorter than subapical one (longer in my specimens) (for comparison see Figs 116, 117). I think there are 2 related and very similar species (see below).

Phaloria (Papuloria) parasimilis sp. n.
(Fig. 117)

Holotype. ♂, Papua – New Guinea, "D. N. Guinea. Lager a. Topferfluss. 13-19.IV.1913. Kais. Augustaf. Exp. Bürgers S.G." (MNHU).

Paratypes. Papua – New Guinea: 3 ♂, "D. N. Guinea. Berlinhafen. H. Schoede S.G." (MHNU and ZIAS); 1 ♂, as holotype (ZIAS); 1 ♂, "D. N. Guinea. Hauptlg. b. Malu. 7.II.1913. Kais. Augustaf. Exp. Bürgers S.G." (MNHU); 1 ♀, "D. N. Guinea. Regen-berg. 550 m. 8-15.V.1913. Kais. Augustaf. Exp. Bürgers S.G." (MNHU); Bismarck Archipelago, New Britain: 1 ♀, "Neupommern. Karlei. Weite Bucht. Peter J. Schneider leg. 1929" (MNHU).

Description. A sufficient description of this species was published as the redescription of "*Ph. similis*" (Gorochov, 1996: p. 73, Figs 278-284, 311, 336, 337, 405-410). The material used for this redescription is the type series of *Ph. parasimilis*. The distinctions from *Ph. similis* are named above (see the *Note* under *Ph. similis*).

Phaloria (Papuloria) solomonica

Gorochov, 1996
(Figs 124-130)

Material. Solomon Is.: Guadalcanal I.: 2 ♂, 2 ♀, "Rua Vata", 7.IV-9.X.1955, E.S. Brown (BMNH); 1 ♂, "Gallego camp 2", 11.VII.1965, Roy. Soc. Exped. (BMNH); 1 ♀, "Tenarute", 13.XII.1954, E.S. Brown (BMNH); Santa Isabel I.: 1 ♂, 1 ♀, "Isabel, Holokama", 4.III.1964, M. McQuillan (BMNH); 1 ♂, "Isabel, Allardyce HBR, Swamp", 24.VII.1963, M. McQuillan (ZIAS); 1 ♀, "Isabel, Rasa", 23.VII.1963, M. McQuillan (ZIAS); New Georgia I.: 1 ♂, "Segi, Marova", 10.V.1934, H.T. Pagden (BMNH); Vella Lavella I.: 1 ♂, "Ulo Crater, 10 m", XII.1963, P. Shanahan Bishop (BMNH); Kolombangara I. (near New Georgia I.): 1 ♀, "Bas camp, 1 ml. inland from Kuzi, by Kolombara R.", 5.IX.1965,

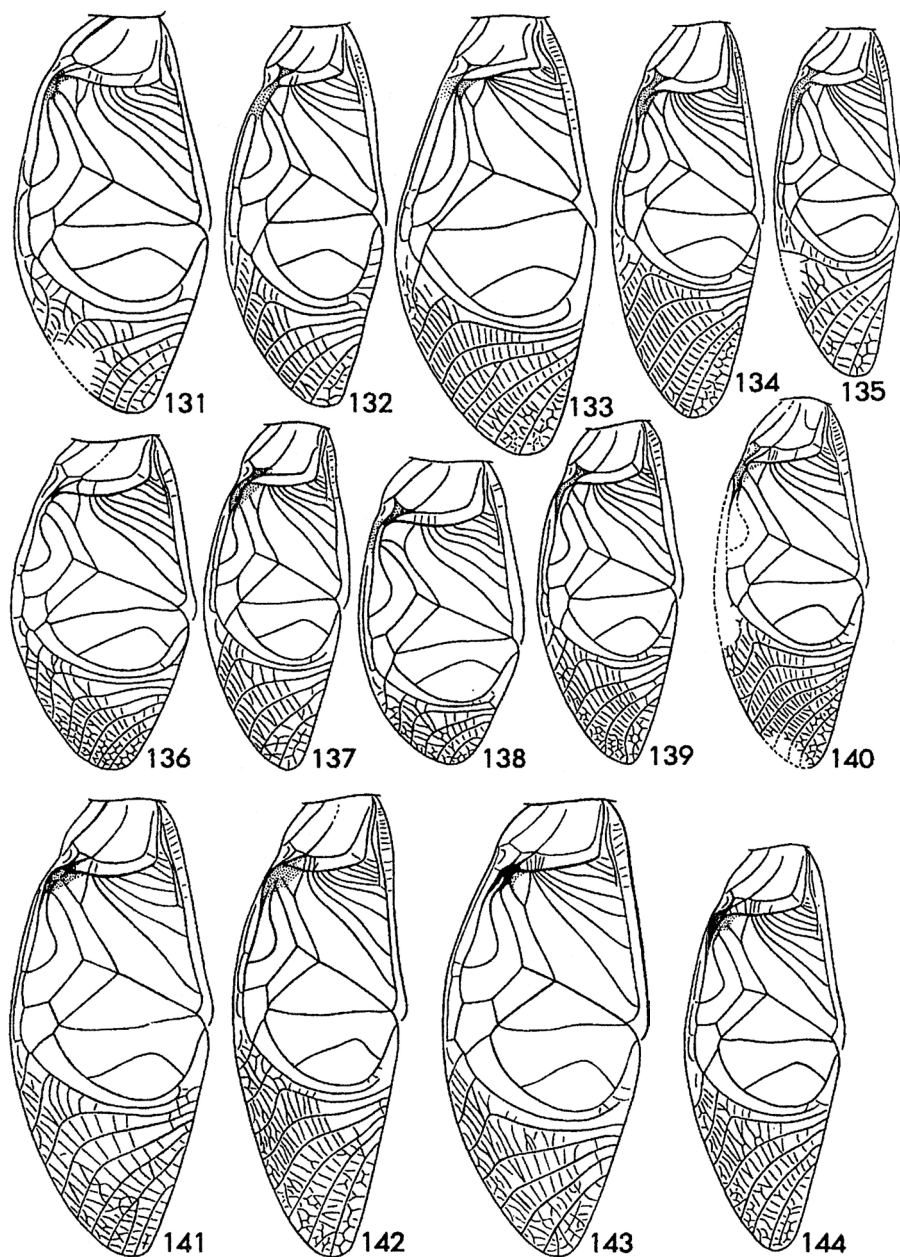
Roy. Soc. Exped. (BMNH); Malaita I.: 1 ♂, "Bau-nani", 6.IX.1954, E.S. Brown (BMNH); 1 ♂, "Su'a", 1.1932, R.A. Lever (ZIAS); 1 ♀, "Matakkwalas", 26.IX.1963, M. McQuillan (BMNH); San Cristoval I.: 1 ♂, 1 ♀, "Maru Bay", 2.V.1955, E.S. Brown (BMNH); 1 ♀, "Cristoval, Kirakira", 25.IV.1964, M. McQuillan (BMNH); 1 ♀, "Waimamura", 20.IV.1955, E.S. Brown (ZIAS); Ugi I. (near San Cristoval I.): 1 ♂, 6.V.1934, R.A. Lever (BMNH). Vanuatu (New Hebrides): Aneityum I.: 1 ♂, "rain forest, 500-1000 ft.", XI.1954, L.E. Cheesman (BMNH); Malekula I.: 1 ♂, II.1930, L.E. Cheesman (BMNH).

Note. This species originally described from Guadalcanal I. (Gorochov, 1996) is divided into 6 subspecies.

1. Almost uniformly light brown or with brown head and pronotum. Mould of the spermatophore attachment plate (in male genitalia) with almost not convoluted longitudinal apodeme (Fig. 129) 2
- Head and pronotum uniformly brown or light brown with dark transverse band along hind edge of pronotum (Figs 124, 125). Mould of the spermatophore attachment plate with convoluted longitudinal apodeme (Fig. 130) 4
2. Distal part of ectoparameres (in male genitalia) with weakly developed apical hook (Fig. 127). Vanuatu. [Holotype: ♂ from Aneityum I.] *Ph. s. vanuatu* subsp. n.
- Distal part of ectoparameres with distinct apical hook (Fig. 128) 3
3. Ovipositor 1.1-1.2 times as long as hind femora. Guadalcanal I. *Ph. s. solomonica* Gor.
- Ovipositor 0.9 times as long as hind femora. Santa Isabel I. [Holotype: ♂ from "Holokama"] *Ph. s. isabel* subsp. n.
4. Head and pronotum almost uniformly brown. Distal part of ectoparameres (in male genitalia) with weakly developed apical hook or without apical hook 5
- Head and pronotum light brown with dark transverse band along hind edge of pronotum (Figs 124, 125). Distal part of ectoparameres without apical hook (Fig. 126). Ovipositor 1.2-1.3 times as long as hind femora. San Cristoval I., Ugi I. [Holotype: ♂ from "Maru Bay"] *Ph. s. cristoval* subsp. n.
5. Male tegmina almost uniformly light brown. Distal part of ectoparameres with weak apical hook or without apical hook. Ovipositor 1.3 times as long as hind femora. New Georgia I., Vella Lavella I., Kolombangara I. [Holotype: ♂ from "Segi Marova"] *Ph. s. novageorgia* subsp. n.
- Male tegmina light brown with brown veins of dorsal part. Distal part of ectoparameres with weak apical hook. Ovipositor 0.9 times as long as hind femora. Malaita I. [Holotype: ♂ from "Bau-nani"] *Ph. s. malaita* subsp. n.

Phaloria (Papuloria) rennell sp. n.
(Figs 149, 150)

Holotype. ♀, Solomon Is, Rennell I., "Matange, 4200", 24.XI.1955, E.S. Brown (BMNH).



Figs 131-144. *Phaloria* and *Trellius*, ♂, dorsal part of tegmen. 131, *Ph. quasipuria* sp. n.; 132, *Ph. popovi* sp. n.; 133, *T. perbonus* sp. n.; 134, *Ph. aperta* sp. n.; 135, *Ph. ostensa* sp. n.; 136, *Ph. pacifica* (Walk.) (holotype); 137, *Ph. browni* sp. n.; 138, *Ph. heterotrypoides* sp. n.; 139, *Ph. inventa* sp. n.; 140, *Ph. offensa* sp. n.; 141, *Ph. aphana* sp. n. (holotype); 142, *Ph. harzi* sp. n. (holotype); 143, *Ph. pararava* sp. n.; 144, *Ph. pareximia* sp. n.

Description. Female (holotype). Very similar to *Ph. solomonica* (head, legs, and tegmina almost uniformly light brown; pronotum light brown with slightly darkened hind part of disc), but slightly smaller, dorsal part

of tegmina with only 9 longitudinal veins, hind wings slightly longer than tegmina, and ovipositor distinctly shorter (0.65 times as long as hind femora). Apex of ovipositor as in Figs 149, 150.

Male unknown.

Length (mm). Body 12.5; body with wings 16; pronotum 2.6; tegmina 11; hind femora 10; hind tibiae 8.7; distal inner spine of hind tibiae 0.9; hind metatarsi 2.2; ovipositor 6.5.

Comparison. The new species is similar also to *Ph. vulgata* Gor. and *Ph. solita* Gor., but distinguished markedly by the uniform coloration of head, slightly narrower rostrum between antennal cavities, and smaller female tegmina with only 9 longitudinal veins at dorsal part.

Phaloria (Papuloria) vulgata Gorochoy, 1996

Material. Papua – New Guinea: 1 ♂, southern New Guinea, "Papua, Kokoda, 1200 ft.", IX.1933, L.E. Cheesman (BMNH). Solomon Is: 1 ♂, Guadalcanal I., "Mt. Austen", V-VI.1963, P. Greenslade (BMNH); 1 ♀, Guadalcanal I., "Oreke, 700 ft.", I-10.XII.1934, R.A. Lever (BMNH); 1 ♀, Vella Lavella I., "Ulo Crater, 10 m", 13.XII.1963, P. Shanahan Bishop (BMNH); 1 ♀, San Cristoval I., "Kirakira", 25.IV.1964, M. McQuillan (BMNH).

It is possible that this species consists of several subspecies, but the material from islands other than New Guinea is too poor.

Phaloria (Papuloria?) pacifica (Walker, 1871) (Fig. 136)

Holotype. ♂, Tonga, Vavau Is ("Vivau", "*Platy-dactylus pacificus*, Vavou") (BMNH).

Description. Male (holotype). Similar to *Ph. solomonica* and *Ph. rennell*, but slightly larger. Head and pronotum brown with a pair of distinct reddish spots on disc; dorsal part of tegmina and legs (hind legs missing) uniformly light brown; lateral part of tegmina transparent with yellowish veins; other parts of body (hind half of abdomen missing) brownish. Rostrum of head and fore tibiae as in *Ph. solomonica* and *Ph. rennell*; tegmina with wide *R-M* area and 26-27 branches of *Sc*; hind wings slightly shorter than tegmina; genitalia unknown (missing).

Female unknown.

Length (mm). Body with wings 21; pronotum 3.5; tegmina 16.

Phaloria (Trelloria) popovi sp. n. (Figs 118-123, 132, 147, 148)

Holotype. ♂, Solomon Is, Malaita I., "Riba caves, behind King George VI School", 27.XI.1965 (BMNH).

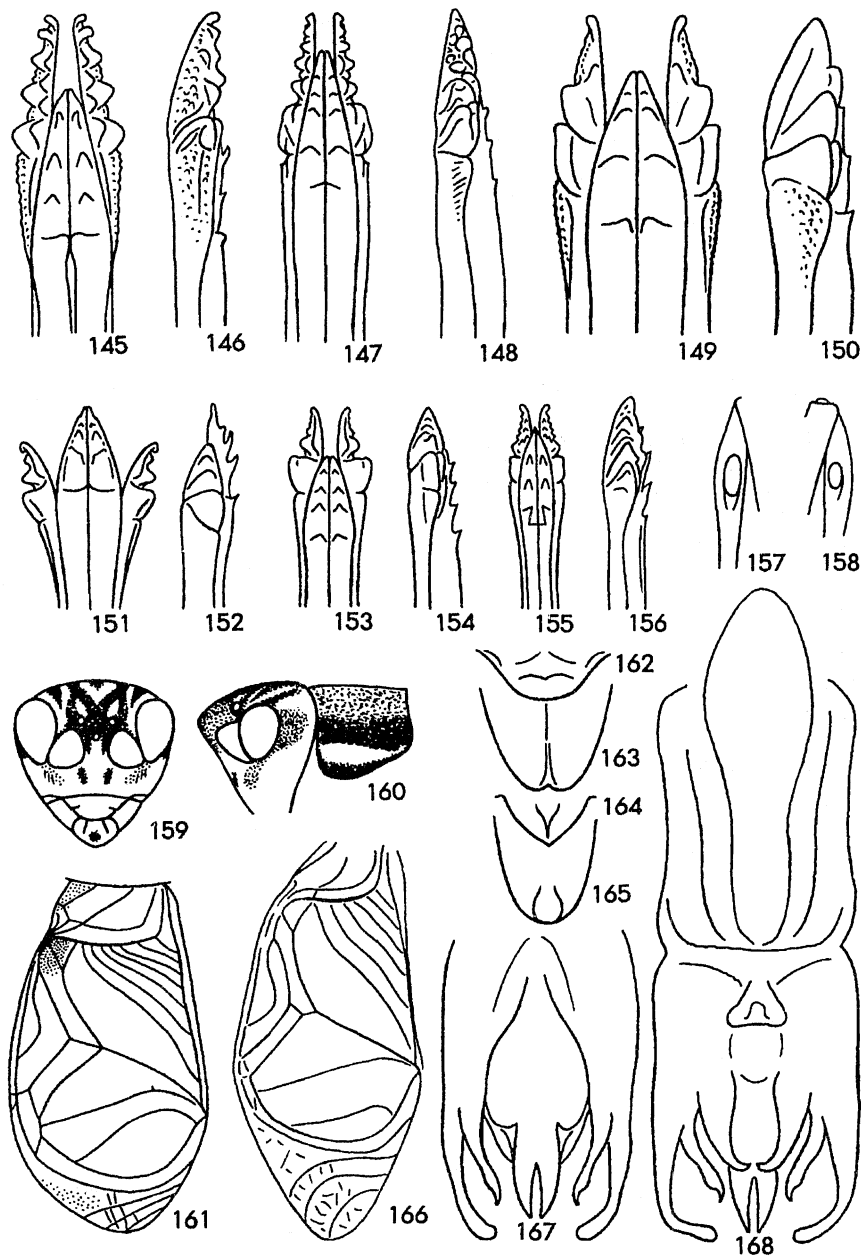
Paratypes. 2 ♀, same data as holotype (BMNH and ZIAS).

Description. Male (holotype). Large, brownish, spotted. Head light brown with 4 darkish longitudinal stripes on vertex, dark spot behind upper part of eyes, small darkening around all ocelli, paired, slightly darkened vertical stripes on fore part of rostrum, darkened apex of palpi, and brownish (almost brown) flagellum of antennae; rostrum between antennal cavities 0.67 times as wide as scape. Pronotum dark brownish grey with several small lightish spots on disc and zig-zag-shaped light brown longitudinal band on lateral lobe not far from its lower edge (between these band and edge there is a dark longitudinal band); pronotum narrowing in front, but not very strongly. Tegmina light brown with greyish tinge, with brown or dark brown veins, darkening along stridulatory vein and basal part of *1A*, slightly darkened apical area, and almost transparent lateral part; *Sc* with 25-27 branches; *R-M* area moderately widened; venation of dorsal part as in Fig. 132. Hind wings dark brownish grey, much longer than tegmina. Legs spotted; fore tibiae with comparatively small elongated inner tympanum and distinctly smaller oval outer tympanum; spines of hind tibiae long. Abdomen light brown, almost uniformly coloured (only with slight darkening at middle part of anal plate and at apex of genital plate); shape of anal and genital plates as in Figs 121, 122; genitalia as in Figs 118-120.

Female. As male, but tegmina distinctly darker, with yellowish brown lateral and brown or almost dark brown dorsal parts. Dorsal part of tegmina with 10-11 longitudinal veins; tegmina *Sc* with 14-16 branches. Ovipositor short; its apex as in Figs 147, 148.

Length (mm). Body: ♂ 22, ♀ 18-19; body with wings: ♂ 30, ♀ 27-29; pronotum: ♂ 3.4, ♀ 3.3-3.6; tegmina: ♂ 18.5, ♀ 18-19; hind femora: ♂ 17.5, ♀ 17-18; hind tibiae: ♂ 16.8, ♀ 16.5-17.2; distal inner spine of hind tibiae: ♂ 3.5, ♀ 3.2; hind metatarsi: ♂ 4.3, ♀ 4.2; ovipositor 5.8-6.2.

Comparison. The species is similar to *Ph. dahli* Gor., but differs in the peculiarities of the male genitalia: hind lateral processes of epiphallus slightly shorter, projections of ectoparameres wider and shorter, shape of mould of the spermatophore attachment plate slightly different, and apodeme of this mould longer.



Figs 145-168. *Phaloria* and *Vescelia*. 145, 146, *Ph. aphana* sp. n.; 147, 148, *Ph. popovi* sp. n.; 149, 150, *Ph. rennell* sp. n.; 151, 152, *Ph. offensa* sp. n.; 153, 154, *Ph. browni* sp. n.; 155-163, *Ph. ? hobbyi* (Chop.) (157-163, holotype); 164, 165, *V. moorei* (Chop.) (holotype); 166-168, *Ph. ? testacea* (Chop.) ?. Apex of ovipositor from below (145, 147, 149, 151, 153, 155) and from side (146, 148, 150, 152, 154, 156); inner (157) and outer (158) tympana of fore tibiae; head in front (159); head and pronotum from side (160); distal half of anal (162, 164) and genital (163, 165) plates of male from above (162, 164) and from below (163, 165); dorsal part of male tegmina (161, 166); male genitalia (without details) from below (only hind half) (167) and from above (168).

Etymology. This species is named in honour of the well-known orthopterist Dr. G.B. Popov.

Phaloria? hobbyi (Chopard, 1940)
(Figs 155-163)

Lectotype (here designated). ♂ with labels: "Sarawak, Mt. Kalulong, 18000 FT, 4.XI.1932, Oxford Univ. Exp. B.M. Hobby & A.W. Moore, B.M. 1933-254", "primitive forest", "in rotting felled timber", "*Heterotrypus hobbyi* Chop., Type" (BMNH).

Paralectotypes. Sarawak: 1 ♀, "Mt. Dulit, Dulit Trail, 2000 FT", VIII.1932, Oxford Univ. Exp. B.M. Hobby & A.W. Moore (BMNH); 1 ♀, "Foot of Mt. Dulit, Junction of rivers Tinjar & Lejok", 5.VIII.1932, Oxford Univ. Exp. B.M. Hobby & A.W. Moore (MNHN).

Description. Male (lectotype). Rather small, brownish. Head light brown with slight darkish ornament as in Figs 159, 160; palpi and antennae more or less light brown also; rostrum between antennal cavities almost as wide as scape; rostrum and frons strongly pubescent. Pronotum distinctly narrowing in front, pubescent, with slightly distinct brown and light brown spots on disc, and with more contrasting ornament on lateral lobe (Fig. 160). Tegmina, fore and middle legs almost uniformly light brown. Tegmina extending to abdominal apex; venation of their dorsal part as in Fig. 161; tegminal *R-M* area rather wide. Hind wings brownish in apical part and slightly shorter than tegmina. Fore tibiae with tympana as in Figs 157, 158; hind legs light brown with slight darkish spots; spines of hind tibiae short. Abdomen brownish, rather light, with anal and genital plates as in Figs 162, 163; genitalia unknown (missing).

Female. Similar to male, but ornament of head rather slight (with small darkenings under eyes, on lateral parts of clypeus, and on middle part of labrum), pronotal disc almost uniformly light brown, lateral lobe of pronotum without lower dark stripe, tegmina brown with yellow longitudinal spot along lateral (costal) edge of dorsal part and almost transparent lateral part, abdomen with dark spot at base of genital plate. Ovipositor rather short, with apex as in Figs 155, 156.

Length (mm). Body: ♂ 12, ♀ 10-11; body with wings: ♂ 14, ♀ 12-13; pronotum: ♂ 2.2, ♀ 2.2-2.4; tegmina: ♂ 10.5, ♀ 8; hind femora: ♂ 10.5, ♀ 10.5; hind tibiae: ♂ 10, ♀ 10; distal inner spine of hind tibiae: ♂ 0.9, ♀ 0.9; ovipositor 7.5.

Note. The generic position of this species is not clear. Originally it was erroneously included in the African genus *Heterotrypus* Sauss.

Phaloria? testacea (Chopard, 1925) ?
(Figs 166-168)

Material. Indonesia, Sumatra: 1 ♂, "Pulu Babi", 2° 7' 96" 40', IV.1913, E. Jacobson (MNHN).

Note. I had an opportunity for only very cursory study of this specimen and cannot determine its generic position more exactly (originally this species was erroneously included in the African genus *Heterotrypus*). It has the labels "cotype" and "*Heterotrypus testaceus* Chop., L. Chopard det.", but this species was described from one specimen (holotype) with the same data. The genitalia of this specimen extracted by me are very similar to those of the holotype, but its tegmina are different (?) (see Chopard, 1925: Figs 49, 50) and coloration is very light brown (almost yellowish) with almost indistinct darkish spots on pronotum.

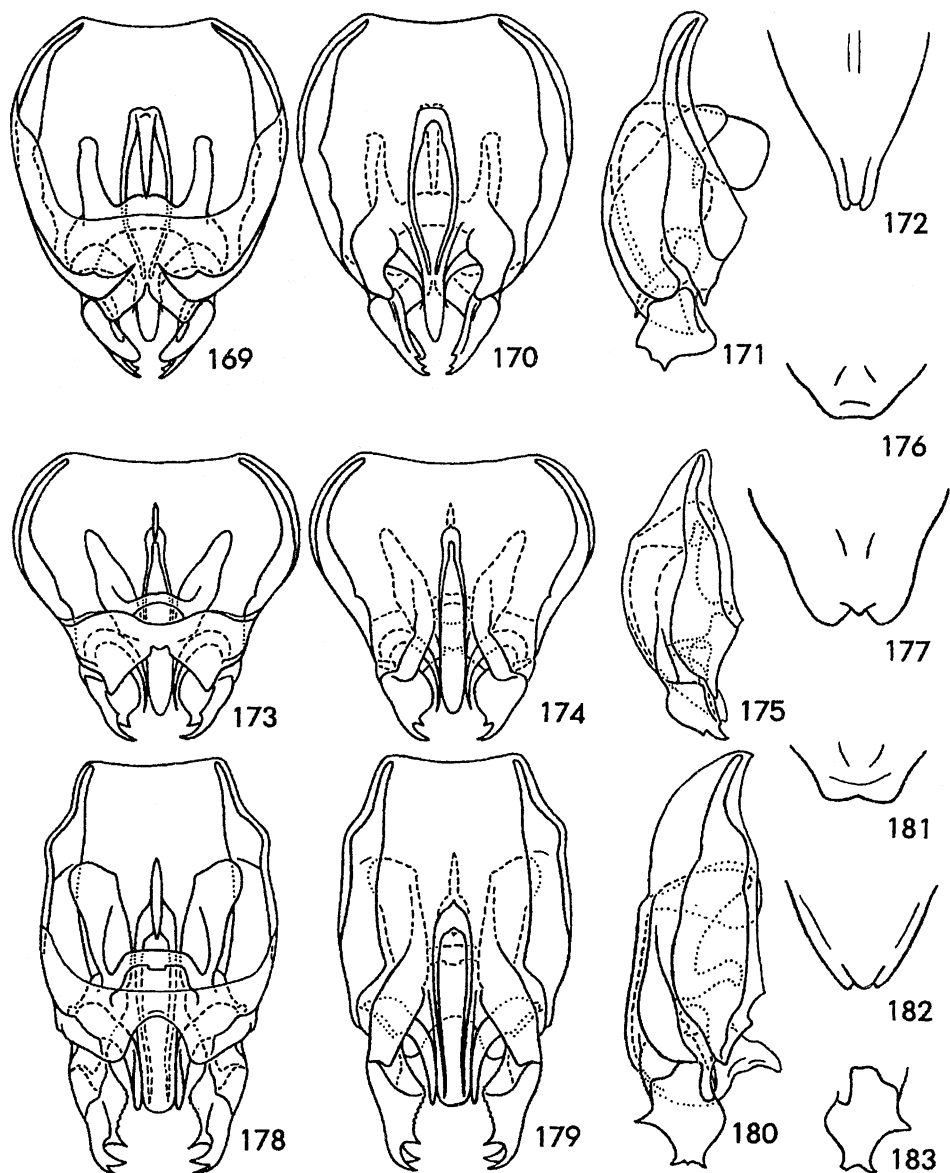
Genus Pseudotrigonidium Chopard, 1915

The genus consists of 2 subgenera: *Pseudotrigonidium* s. str. with 20-21 species and *Tripsegonium* Gorochoy, 1996 with 2 species.

Pseudotrigonidium (Pseudotrigonidium)
proximum Gorochoy, 1996
(Figs 169-172, 188-190)

Material. Solomon Is: 1 ♂, New Georgia I., "Munda, 1-30 m", 13.VII.1959 (BMNH).

Description. Male (nov.). Similar to male of *P. anomalum* Gor. from New Guinea (see its description in Gorochoy, 1996: 88), but differs in peculiarities of coloration of head and pronotum (which is as in holotype of this species, female from New Britain), especially in characteristic light transverse band under antennal cavities (this band is interrupted by dark median part in *P. anomalum*) (for comparison see Figs 188, 191), presence of light spot on chords area and dark spot near lateral corner of mirror on tegmina, slightly longer darkish hind wings which are hardly shorter than tegmina, smaller guiding rod, and different shape of hind part of ectoparameres (Fig. 171). Fore and middle legs light brown with distinct dark spots; hind legs almost uniformly light brown (with only slightly darkened second tarsal segment and apical part of femur and metatarsus) and with short spines. Tegmina only extending to abdominal apex. Abdomen brownish, rather light; genital plate as in Fig. 172 (anal plate destroyed); genitalia as in Figs 169-171.



Figs 169-183. *Pseudotrignididium*, ♂. 169-172, *P. proximum* Gor.; 173-177, *P. probatum* sp. n.; 178-183, *P. venustum* sp. n. Genitalia from above (169, 173, 178), from below (170, 174, 179), and from side (171, 175, 180); distal half of genital (172, 177, 182) and anal (176, 181) plates from below (172, 177, 182) and from above (176, 181); right ectoparamere from side (183).

Female. Only 1 specimen is known (see original description in Gorochoy, 1996: 88, 89).

Length (mm). Body: ♂ 13.5, ♀ 11.5; pronotum: ♂ 2.4, ♀ 2.1; tegmina: ♂ 9.8, ♀ 9.2; fore femora: ♂ 4.1, ♀ 3.8; hind femora: ♂ 13, ♀ 12.2; hind tibiae: ♂ 12, ♀ 11.1; hind metatarsi: ♂ 1.9, ♀ 1.7; ovipositor 6.

***Pseudotrignididium* (*Pseudotrignididium*) *probatum* sp. n.**

(Figs 173-177, 184-186)

Holotype. ♂, Australia, Queensland (ZIAS).

Description. Male (holotype). Rather small, brownish, spotted. Head and pronotum light greyish brown with dark ornament

as in Figs 184-186; scape light brownish with several small darkish spots; palpi uniformly light brownish; rostrum between antennal cavities about 0.8 times as wide as scape. Tegmina light greyish with greyish brown longitudinal band on lateral part and several slight brownish darkenings (Figs 185, 186). Hind wings hardly shorter than tegmina. Fore (or middle?) femur more or less uniformly light brown (other legs and parts of legs missing). Abdomen brownish; anal and genital plates as in Figs 176, 177; genitalia with small guiding rod, rather small apodeme of mould of the spermatophore attachment plate, comparatively narrow ectoparameres, and narrow transverse median endoparameral sclerite (Figs 173-175).

Female unknown.

Length (mm). Body 11; body with wings 12; pronotum 2.1; tegmina 8.7; fore (?) femur 6.4.

Comparison. The new species is similar to *P. anomalum* and *P. proximum*, but differs markedly from them in the coloration and peculiarities of the male genitalia. It is distinguished from *P. australe* (Chop.) by the male tegmina: stridulatory vein shorter, oblique veins more straight, mirror smaller, darkish spots of distal part lighter and differently located.

***Pseudotrigonidium* (*Pseudotrigonidium*)**

***venustum* sp. n.**

(Figs 178-183, 192-194)

Holotype. ♂, Solomon Is, Guadalcanal I., "Gallego camp 2, Hidden Valley, grass area on ridge behind camp", 10-14.VII.1965, Roy. Soc. Exped. (BMNH).

Description. Male (holotype). Medium-sized, light, slightly spotted. Head and pronotum light brownish (almost cream-coloured) with distinct darkenings as in Figs 192-194; antennae light with small darkish spot on upper part of scape; palpi uniformly light; rostrum between antennal cavities about half as wide as scape. Tegmina light brownish with darkenings as in Figs 192 and 193, slightly not extending to abdominal apex. Hind wings shorter than tegmina. Middle legs light with distinct brown spots; hind femora almost uniformly light brownish; hind tibiae spotted, with short spines (fore legs missing). Abdomen very light; anal and genital plates as in Figs 181, 182; genitalia as in Figs 178-180, 183.

Female unknown.

Length (mm). Body 15; pronotum 2.7; tegmina 10; middle femora 6.8; hind femora 16; hind tibiae 14.2; hind metatarsi 3.2.

Comparison. This species is similar to *P. anomalum* in the male genitalia including guiding rod, but differs in the light coloration, shorter apical area of male tegmina, and shape of ectoparameres.

***Pseudotrigonidium* (*Pseudotrigonidium*)**

***lepidum* sp. n.**

(Figs 195-199)

Holotype. ♀, New Guinea, "Ekeikei", IV.1903, Pratt (BMNH).

Description. Female (holotype). Very similar to *P. venustum*, but darkenings on head and pronotum larger (Figs 195, 198, 199), antennal pedicellus darkened, and pronotum shorter. Tegmina cream-coloured with brown and dark brown veins and spots as in Figs 198, 199. Hind wings slightly longer than tegmina, with greyish brown distal part. Coloration of fore legs (middle and hind legs missing) distinctly spotted. Ovipositor shorter than fore femora, with apex as in Figs 196, 197.

Male unknown.

Length (mm). Body 11; body with wings 14; pronotum 2.4; tegmina 9.8; fore femora 6.7; ovipositor 5.8.

Comparison. Distinctions from *P. venustum* are named above. From all other known species of this subgenus, the new species differs in the characteristic coloration, size, and length of legs.

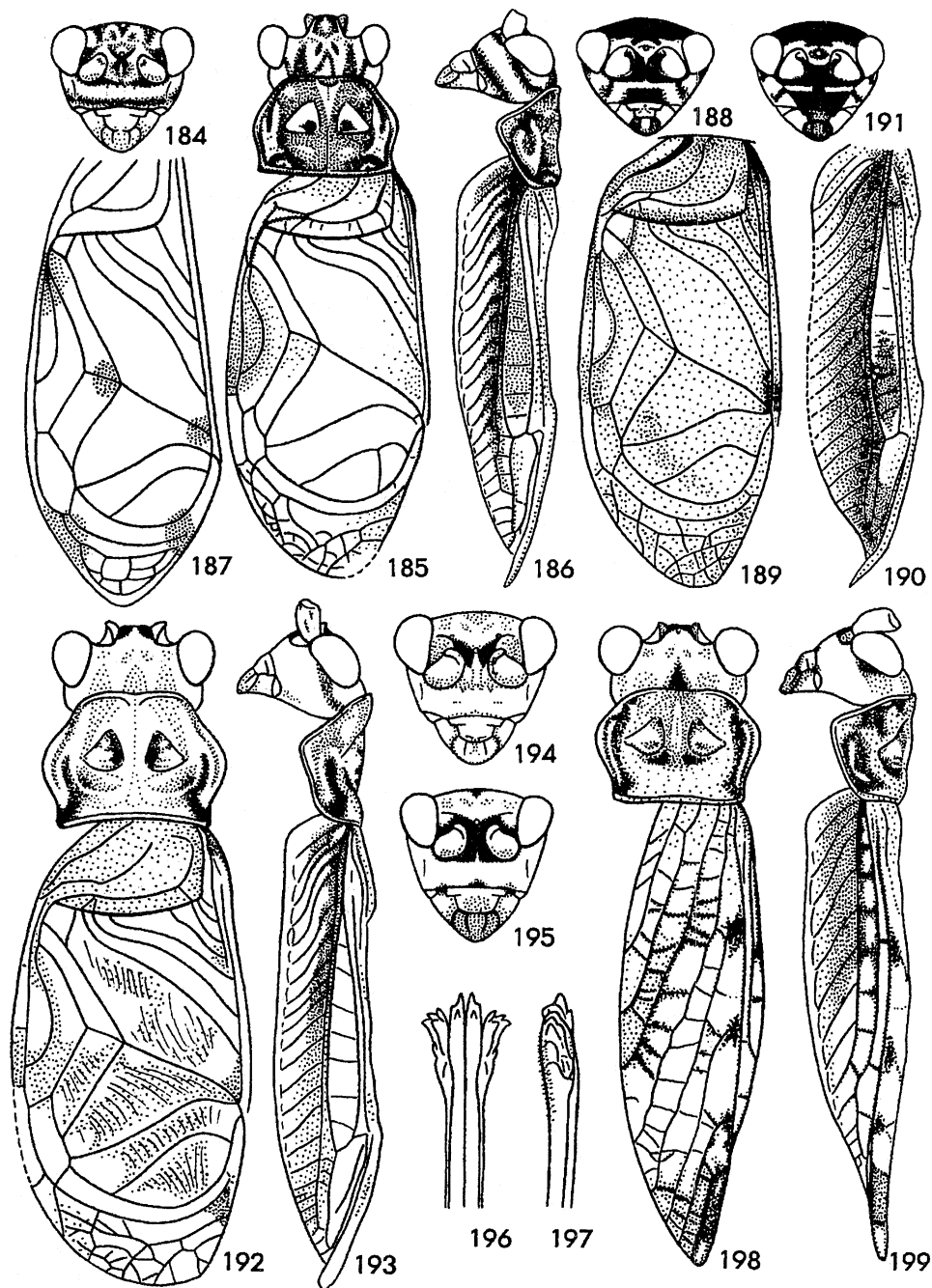
***Pseudotrigonidium* (*Pseudotrigonidium*)**

***cheesmanae* sp. n.**

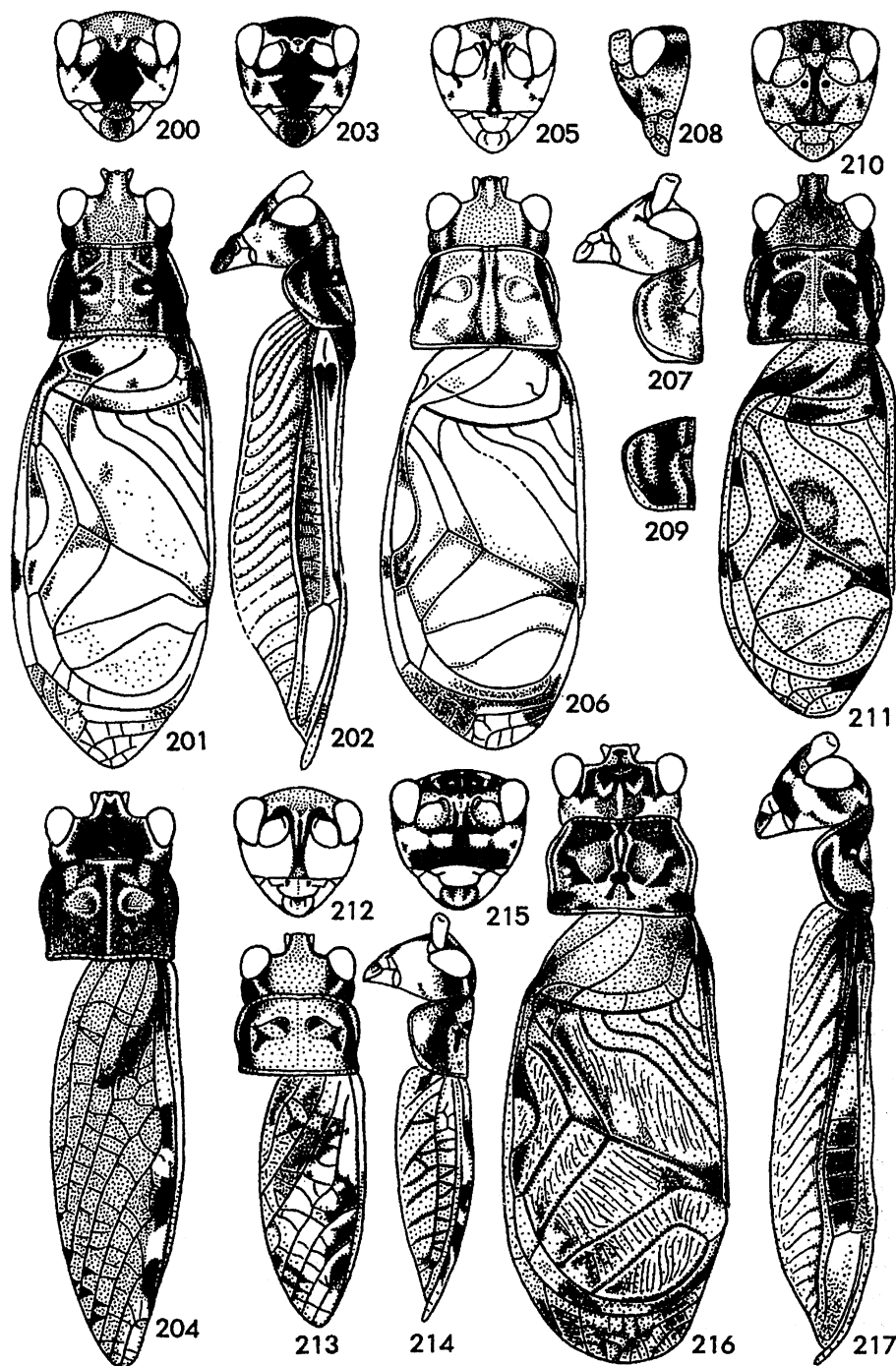
(Figs 200-202, 218-222)

Holotype. ♂, Papua - New Guinea, southern New Guinea, "Papua, Kokoda, 1200 ft.", IX.1933, L.E. Cheesman (BMNH).

Description. Male (holotype). Rather small, brownish, spotted. Head and pronotum light brown with dark brown ornament as in Figs 200-202; palpi and basal part of antennae light brown; rostrum between antennal cavities about 0.8 times as wide as scape. Tegmina light brown with brown and dark brown spots; these spots and tegminal venation as in Figs 201, 202. Hind wings hardly shorter than tegmina, with darkish distal part. Fore legs light brown with numerous small slightly darkish spots on femora and several large slightly darkened bands on tibiae and tarsi (middle and hind



Figs 184-199. *Pseudotrignididum*. 184-186, *P. probatum* sp. n.; 187, *P. australe* (Chop.); 188-190, *P. proximum* Gor. (186, holotype); 191, *P. anomalum* Gor. (holotype); 192-194, *P. venustum* sp. n.; 195-199, *P. lepidum* sp. n. Head in front (184, 188, 191, 194, 195); head, pronotum, and tegmen from above (185, 192, 198) and from side (186, 193, 199); dorsal (187, 189) and lateral (190) parts of tegmen; apex of ovipositor from below (196) and from side (197).



Figs 200-217. *Pseudotrignidium*. 200-202, *P. cheesmanae* sp. n., ♂; 203, 204, *P. greensladei* sp. n., ♀; 205-207, *P. pulchellum* sp. n., ♂ (holotype); 208-211, *P. duplum* sp. n., ♂; 212-214, *P. significatum* sp. n., ♀; 215-217, *P. rasnitsyni* sp. n., ♂. Head in front (200, 203, 205, 210, 212, 215) and from side (208); head, pronotum, and tegmen from above (201, 204, 206, 211, 213, 216) and from side (202, 214, 217); head with pronotum (207) and only pronotum (209) from side.

legs missing). Abdomen light brown with paired slight darkenings near cercal base (on lateral abdominal surfaces); anal plate, genital plate, and genitalia as in Figs 218-222.

Female unknown.

Length (mm). Body 10; body with wings 12.3; pronotum 2; tegmina 9; fore femora 3.4.

Comparison. The new species is similar to *P. anomalum* in the ornament of frontal surface of head, but the large frontal dark spot is narrower and with light lateral notches directed obliquely to median ocellus (not transverse), upper part of head lighter, and male genitalia with characteristic shape of ectoparameres and rather small guiding rod.

Pseudotrigonidium (Pseudotrigonidium)

greensladei sp. n.

(Figs 203, 204)

Holotype. ♀, Solomon Is, Guadalcanal I., "Mt. Austen, 6009", 25.IV.1963, P. Greenslade (BMNH).

Description. Female (holotype). Similar to *P. anomalum* and *P. cheesmanae*, but large frontal spot rather narrow (as in *P. cheesmanae*) and with almost transverse light lateral notches (as in *P. anomalum*) (Fig. 203); upper part of head almost entirely dark brown; antennae light brown with slightly lighter and slightly darker sparse spots on flagellum; palpi very light with slightly darkened apex. Pronotum somewhat darker than in both above mentioned species; its lateral parts practically uniformly dark brown. Tegmina brownish grey with several dark and yellowish spots on dorsal part (Fig. 204), darkened veins, and darkish narrow stripes along all 13 branches of *Sc*. Hind wings darkish; lengths of both pairs of wings almost equal. Fore and middle legs distinctly spotted (hind legs missing). Abdomen light brown with several distal tergites slightly darkened; ovipositor distinctly shorter than in *P. anomalum*.

Male unknown.

Length (mm). Body 12; body with wings 12.5; pronotum 2.3; tegmina 8.6; fore femora 3.9; ovipositor 4.7.

Comparison. The distinctions from the two most related species are listed above. From other congeners, the new species differs in the same characters as *P. anomalum* and *P. cheesmanae*.

Pseudotrigonidium (Pseudotrigonidium)

pulchellum sp. n.

(Figs 205-207, 229-234)

Holotype. ♂, Solomon Is, Malaita I., "Baunani, 1021", 10.IX.1954, E.S. Brown (BMNH).

Paratypes. Solomon Is: 1 ♂, San Cristoval I., "Camp 2", 3.VIII.1965, Warachito-Pagato confluence (ZIAS); 1 ♂, Guadalcanal I., "Malatoha, 11763", 25.II.1964, P. Greenslade (BMNH).

Description. Male (holotype). Rather small, yellowish with sparse spots. Head yellowish with light brown large spot on vertex, paired longitudinal stripes behind medial parts of eyes, rather large paired spots behind lateral parts of eyes, and dark brown vertical stripes on frontal part (Figs 205-207); palpi yellowish; antennae light brownish with partly yellowish scape and sparse small yellowish spots on proximal half of flagellum (distal half of flagellum slightly darkened); rostrum between antennal cavities about 0.8 times as wide as scape. Pronotum yellowish with light brown and brown ornament as in Figs 206, 207. Tegmina yellowish with almost transparent stridulatory areas and areas between branches of *Sc*, with several dark and darkish spots on dorsal part (Fig. 206) and all 19 branches of *Sc* brownish. Hind wings slightly shorter than tegmina. Legs almost uniformly yellowish (with only sparse, very slight spots on tibiae and tarsi); spines and spurs of hind tibiae rather short. Abdomen yellowish; anal and genital plate as in Figs 232, 233; genitalia with comparatively large guiding rod and characteristic shape of ectoparameres (Figs 229-231).

Variations. Specimen from Guadalcanal I. with uniformly yellowish head and pronotum; specimen from San Cristoval I. with coloration intermediate between two other specimens. There is also a little variability in the shape of ectoparameres (Fig. 234).

Female unknown.

Length (mm). Body 10-11; body with wings 11.5-12.5; pronotum 2.2-2.3; tegmina 8.8-9.4; fore femora 3.6-3.8; hind femora 11-11.5; hind tibiae 10.5-11; hind metatarsi 1.8-1.9.

Comparison. *P. pulchellum* differs from all congeners in the very characteristic yellowish coloration and peculiarities of the male genitalia.

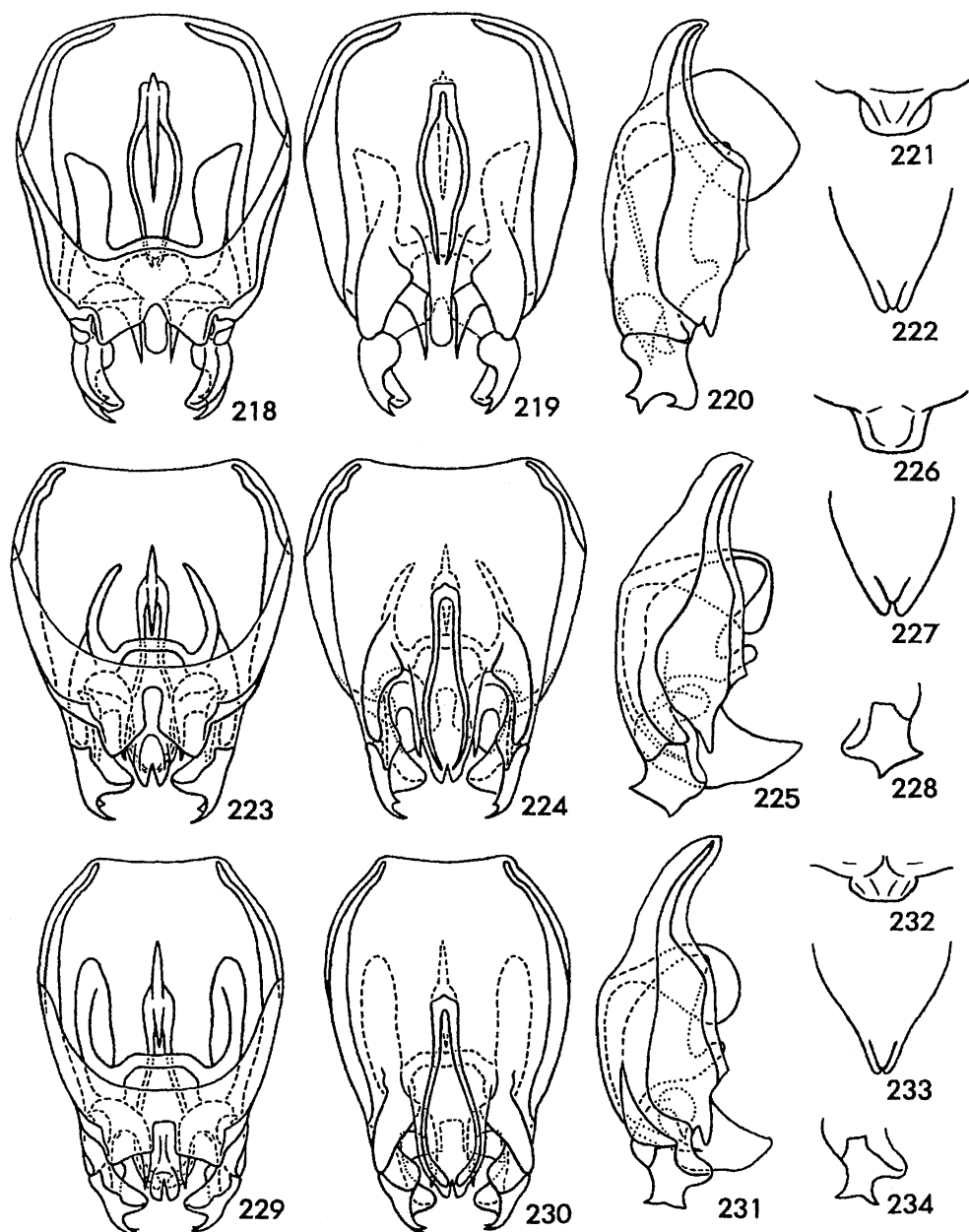
Pseudotrigonidium (Pseudotrigonidium)

duplum sp. n.

(Figs 208-211, 223-228)

Holotype. ♂, Vanuatu (New Hebrides), Banks Is, Vanua Lava I., XI.1929, L.E. Cheesman (BMNH).

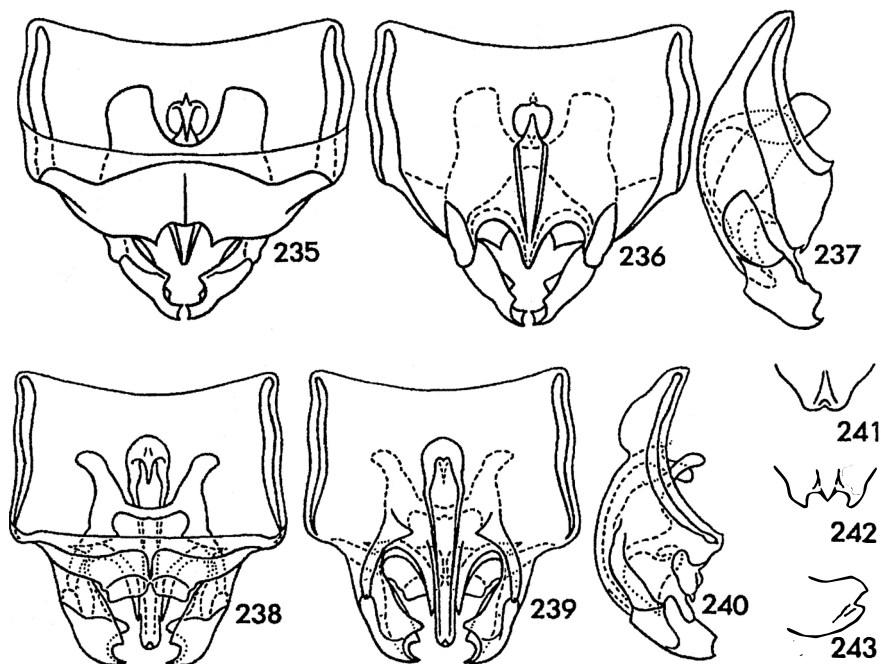
Description. Male (holotype). Rather small, brownish, spotted. Head and pronotum light brown with darkish ornament as in



Figs 218-234. *Pseudotriongidium*, ♂. 218-222, *P. cheesmanae* sp. n.; 223-228, *P. duplum* sp. n.; 229-234, *P. pulchellum* sp. n. (229-233, holotype). Genitalia from above (218, 223, 229), from below (219, 224, 230), and from side (220, 225, 231); distal half of anal (221, 226, 232) and genital (222, 227, 233) plates from above (221, 226, 232) and from below (222, 227, 233); right (228) and left (234) ectoparameres from side.

Figs 208-211; palpi light brown with darkened apical part; antennae with light brown scape and slightly darker base of flagellum; rostrum between antennal cavities about 0.67 times as wide as scape. Tegmina light

brownish grey with darkenings of dorsal part as in Fig. 211, with darkish *R-M* area (width of this area as in *P. cheesmanae*) and distal half of lancet-like cell at lateral part; *Sc* with 20 branches (these branches and ar-



Figs 235-243. *Pseudotrignidium*, ♂. 235-237, *P. javanicum* (Chop.); 238-243, *P. rasnitsyni* sp. n. Genitalia from above (235, 238), from below (236, 239), and from side (237, 240); distal half of anal plate from above (241); distal half of genital plate from below (242) and from side (243).

eas between them almost unicoloured). Hind wings darkish, slightly shorter than tegmina. Fore and middle legs distinctly spotted (hind legs missing). Abdomen light brownish; anal and genital plate as in Figs 226, 227; genitalia very similar to those of *P. pulchellum*, but guiding rod scarcely larger and ectoparameres with wider distal part (Figs 223-225).

Female unknown.

Length (mm). Body 11.2; body with wings 11.6; pronotum 2; tegmina 8; fore femora 3.6.

Comparison. The new species is very similar to *P. pulchellum* in the male genitalia, but differs markedly in darker coloration, narrower male tegmina with smaller mirror, and shape of ectoparameres.

***Pseudotrignidium* (*Pseudotrignidium*)
significatum sp. n.
(Figs 212-214)**

Holotype. ♀, Papua – New Guinea, southern New Guinea, "Papua, Mt. Tafa, 8.500 ft", II.1934, L.E. Cheesman (BMNH).

Description. Female (holotype). Small, brownish, spotted. Head and pronotum light brownish with dark brown spots as in Figs

212-214, greyish disc and upper part of vertex; antennae and palpi light, but antennae slightly spotted (scape almost unicoloured); rostrum between antennal cavities hardly narrower than scape. Tegmina shortened, not reaching abdominal apex, light brownish grey with characteristic brown and dark brown ornament (Figs 213, 214). Hind wings strongly shortened. Fore and middle legs with almost unicoloured (light brown) femora and distinctly spotted tibiae and tarsi (hind legs missing). Abdomen light brown with a pair of darkenings on lateral parts of hind tergites; ovipositor typical of this subgenus.

Male unknown.

Length (mm). Body 8; pronotum 1.7; tegmina 5.2; fore femora 3.4; ovipositor 4.3.

Comparison. The new species differs from all other congeners in the characteristic coloration and shortened tegmina.

***Pseudotrignidium* (*Tripegonium*)
rasnitsyni sp. n.
(Figs 215-217, 238-243)**

Holotype. ♂, Indonesia, western Java, "Sukabumi, 2000", 1893 (MIZP).

Description. Male (holotype). Very similar to *P. javanicum* (Chop.), but slightly darker, tegmina without distinct yellowish spots (rather light brown with dark spots only) and with more S-shaped oblique veins (Figs 215-217), anal plate with distinct notch at apex, genital plate with shorter hind median lobule, and genitalia narrower, with smaller epiphallus, slightly larger guiding rod, narrower endoparameres and their apodemes, and different shape of distal part of ectoparameres (Figs 238-243). Hind wings darkish, distinctly shorter than tegmina.

Female unknown.

Length (mm). Body 12; body with wings 13; pronotum 2.1; tegmina 9.5; fore femora 5.7; hind femora 13; hind tibiae 12.2; hind metatarsi 2.8.

Comparison. Distinctions from the second species of this subgenus are given above.

Etymology. This species is named in honour of the well-known paleoentomologist Prof. A.P. Rasnitsyn.

Genus *Schizotrypus* Chopard, 1954

This genus, in the provisional interpretation given below, is characterized by medium-sized body, large slit-like outer tympanal opening and smaller oval inner one, undenticulated or almost undenticulated male anal plate, notched apical part of male genital plate, distinct peculiarities of male genitalia [epiphallus divided into 3 sclerites and without any distal processes; distal part of guiding rod with very large and extended paired distal lateral processes (median lobe between them small or absent) and distinctly smaller proximal part (latter part fused with mould of the spermatophore attachment plate in all known African genera of Phalorinae)] (Figs 260-262), and smooth apical part of ovipositor (without any denticulation) (Fig. 250). I provisionally include here 4 species: *Sch. variegatus* Chopard, 1954 (type species), *Heterotrypus conradti* Gorochoy, 1996, *H. modestus* Gorochoy, 1996, and *Sch. planus* sp. n.

Schizotrypus conradti (Gorochoy, 1996) (Fig. 250)

Material. Nigeria, Cross River State: 1 ♂, "2000, 27 km NE Calabar", 22.XI.1983 (BMNH); 1 ♀, "80 km E of Calabar", 3.V.1982 (BMNH); 1 ♂, "900-1100, Bueoro", 8.XI.1983 (ZIAS).

Description. Female (nov.). Similar to male (see description in Gorochoy, 1996),

but pronotum unicoloured. Coloration uniformly light brownish (almost yellowish) with slightly spotted legs (fore legs missing) and intensely brown most part of antennae (scape and pedicellus yellowish). Wings long; hind wings much longer than tegmina; dorsal part of tegmina with 9-10 longitudinal veins and regular transverse veinlets; tegminal lateral part with 11-12 branches of Sc. Ovipositor rather long, with apex as in Fig. 250.

Male. Both specimens from Nigeria similar to the holotype from Cameroon (Gorochoy, 1996: Figs 191-194, 206-208, 232, 233), but coloration slightly lighter, with less distinct spots and darkish upper half of fore tibiae, tegmina slightly shorter, and anal plate with very small apical notch.

Length (mm). Body: ♂ 13.5-16.5, ♀ 15; body with wings: ♂ 23-24, ♀ 25; pronotum: ♂ 2.2-2.3, ♀ 2.6; tegmina: ♂ 17-18, ♀ 17.7; hind femora: ♂ 11-11.3, ♀ 11.2; hind tibiae: ♂ 10.7-11, ♀ 10.6; distal inner spine of hind tibiae: ♂ 2.5-2.6, ♀ 2.5; hind metatarsi: ♂ 2.8-3, ♀ 3.1; ovipositor 11.

Schizotrypus variegatus Chopard, 1954 (Figs 251-254)

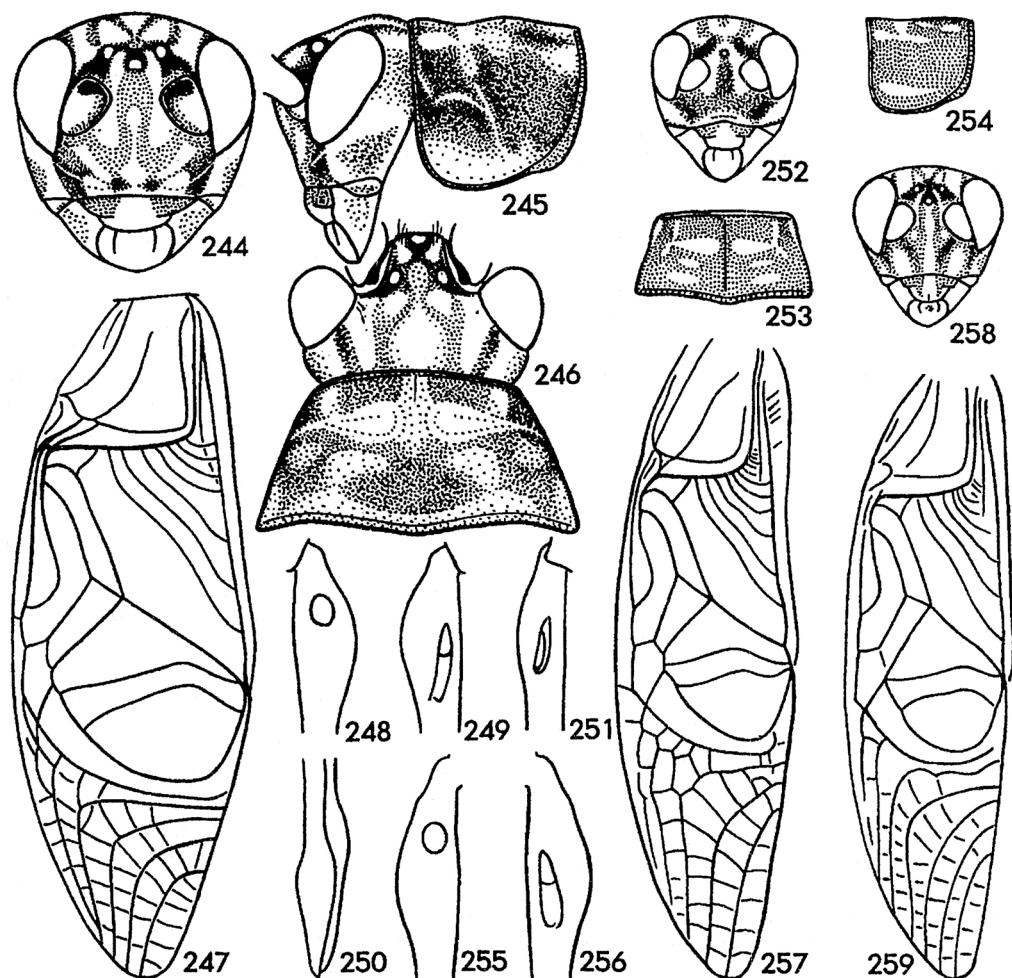
Holotype. ♂, Guinea, "Mt. To, 1600 m, Camp 1, Nimba", II-VI.1942, M. Lamotte (MNH).

Only 1 specimen (holotype) of this species is known. It is similar to *Sch. conradti*, but the area of tympanal organs of fore tibiae less inflated (Fig. 251), coloration slightly darker (brownish) and with larger dark parts on head and pronotum (Figs 252-254), legs distinctly spotted, hind wings slightly longer than tegmina, and ovipositor scarcely longer than hind femora.

Schizotrypus planus sp. n. (Figs 244-249, 260-265)

Holotype. ♂, Nigeria, "S. Nigeria, Oban Distr., 147", 1910, P.A. Talbot (BMNH).

Description. Male (holotype). Rather small, brownish grey, slightly spotted. Head small, with large eyes and ocelli; rostrum between antennal cavities almost as wide as scape; coloration of head light brown with slightly darkened greyish spots as in Figs 244-246; palpi and antennae uniformly light brown. Pronotum distinctly narrowing in front, brownish grey with almost indistinct lightish spots as in Figs 245, 246. Tegmina long, rather narrow, and distinctly pubescent; venation of dorsal part as in Fig. 247;



Figs 244-259. *Schizotrypus* and *Subtiloria*. 244-249, *Sch. planus* sp. n.; 250, *Sch. conradti* (Gor.); 251-254, *Sch. variegatus* Chop. (holotype); 255-258, *S. stena* sp. n.; 259, *S. angusta* (Chop.) (holotype). Head in front (244, 252, 258); head and pronotum from side (245) and from above (246); dorsal part of male tegmina (247, 257, 259); inner (248, 249) and outer (249, 251, 256) tympana from side; apical part of ovipositor from side (250); pronotum from above (253) and from side (254).

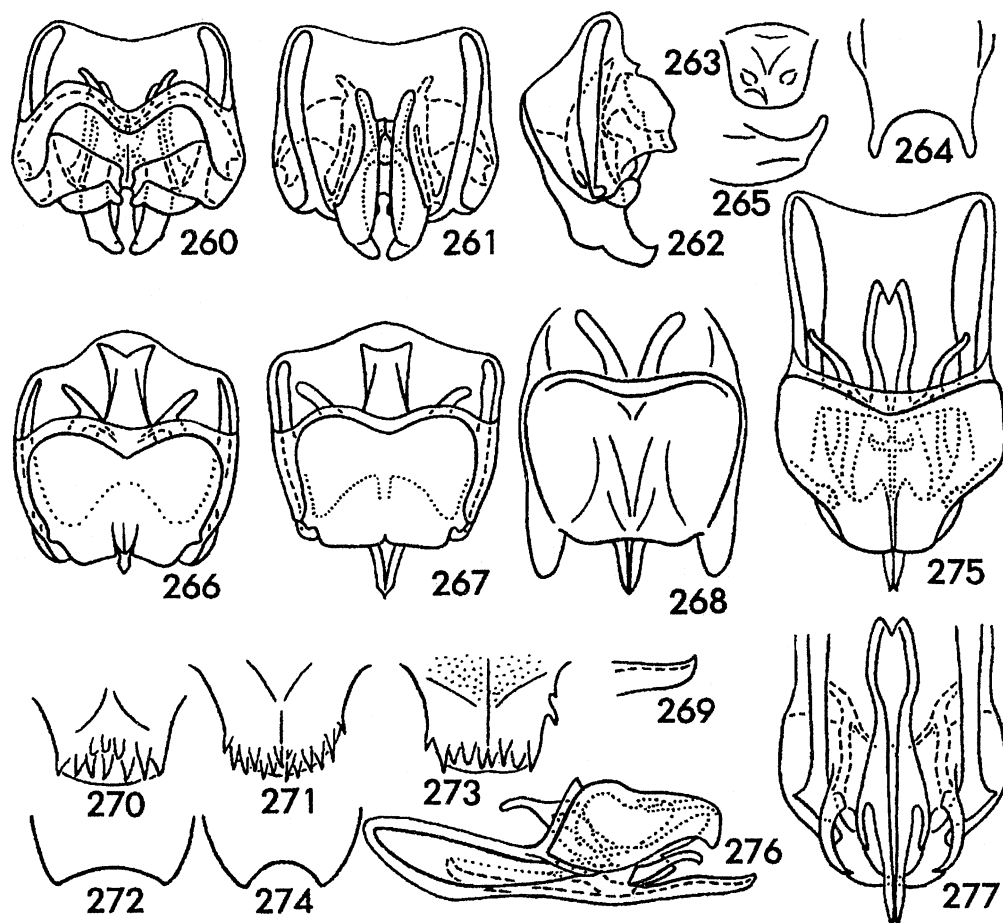
lateral part with narrow *R-M* area and 18-19 branches of *Sc*; tegminal coloration almost uniformly brownish grey, but slightly lighter than general coloration of pronotum. Hind wings with dark grey distal part, much longer than tegmina. Fore legs with very inflated region of tympanal organ (Figs 248, 249), slightly spotted (middle and hind legs missing). Abdomen almost uniformly light brown with greyish tinge; anal plate with 1 tooth (Fig. 263); genital plate with rather

long and narrow hind lateral lobes (Figs 264, 265); genitalia as in Figs 260-262.

Female unknown.

Comparison. Similar to *Sch. modestus*, but the male anal plate undenticulated and the male genitalia with more simple arched shape of paired distal lateral lobes of guiding rod.

Length (mm). Body 13; body with wings 19; pronotum 1.9; tegmina 13.8; fore femora 3.7.



Figs 260-277. *Schizotrypus* and *Subtiloria*, ♂. 260-265, *Sch. planus* sp. n.; 266, *S. subtilis* (Gor.) (holotype); 267, *S. succinea* (Bol.) (lectotype); 268-270, *S. villosa* (Chop.) (holotype); 271, 272, *S. angusta* (Chop.) (holotype); 273-277, *S. stena* sp. n. Genitalia from above (260, 266, 267, 275), from below (261), and from side (262, 276); distal half of anal plate from above (263, 270, 271, 273); distal half (264, 265) and apical part (272, 274) of genital plate from below (264, 272, 274) and from side (265); genitalia without proximal part from above (without details) (268) and from below (277); apical part of distal lateral process of guiding rod from side (269).

Genus *Subtiloria* gen. n.

Type species *Heterotrypus subtilis* Gorochoy, 1996 (Nigeria and Cameroon).

Diagnosis. Similar to *Schizotrypus*, but body small, apical part of male anal plate with numerous denticles (Figs 270, 271, 273), male genitalia with undivided epiphallus, narrow and contacting with each other paired distal lateral processes of guiding rod, larger proximal part of guiding rod (fused with mould of the spermatophore attachment plate), and large unpaired distal median lobe of guiding rod (Figs 266-269, 275-277). From *Heterotrypus* Sauss., this genus

differs in the same characters as *Schizotrypus* (male genitalia without any distal processes of epiphallus; apical part of ovipositor smooth, undenticulated).

Included species: type species, *Heterotrypus succineus* Bolivar, 1910, *H. angustus* Chopard, 1958, *H. villosus* Chopard, 1967, and *S. stena* sp. n.

Subtiloria stena sp. n.

(Figs 255-258, 273-277)

Holotype. ♂, Principe I., "S. Principe, edge of forest area", 17.IX.1949, G.R. Cradwell & D. Snow (BMNH).

Description. Male (holotype). Small, brownish grey, comparatively light. Head with large eyes and rather large ocelli; rostrum between antennal cavities almost as wide as scape; coloration of head light brown with greyish hind half of vertex and slightly darkened spots on fore part of head as in Fig. 258 (head behind upper and central parts of eyes without distinct darkenings); palpi, antennae, and pronotum almost uniformly light brown (pronotum with greyish pubescence). Tegmina long, narrow, and slightly pubescent; venation of dorsal part as in Fig. 257; lateral part with narrow *R-M* area and 17 branches of *Sc*; tegminal coloration uniformly light brown. Hind wings slightly darkened distally, much longer than tegmina. Femora light brown with almost indistinct darkish spots; tibiae and tarsi light brown with somewhat more distinct darkish spots; region of tympanal organs strongly inflated (Figs 255, 256). Abdomen light brown; anal and genital plate as in Figs 273, 274; genitalia with long rami and rather short ectoparameres (their apex extending to only distal edge of epiphallus) (Figs 275-277).

Female unknown.

Length (mm). Body 13; body with wings 20; pronotum 1.7; tegmina 12.8; hind femora 10.2; hind tibiae 9.7; distal inner spine of hind tibiae 2; hind metatarsi 2.8.

Comparison. The new species differs from *S. subtilis* and *S. succinea* in the long rami of the male genitalia; the distinctions from *S. villosa* and *S. angusta* will be named below.

***Subtiloria villosa* (Chopard, 1967)**
(Figs 268-270)

Holotype. ♂, Congo, "Odzala", X.1963, Mission A. Descarpentries & A. Villiers (MNHN).

I had opportunity for only cursory study of this specimen. It is very similar to all other known species of this genus in general appearance, but its tegmina are strongly pubescent, anal plate as in Fig. 270, and genitalia with rather long distal lateral processes of guiding rod and very long ectoparameres extending to apex of these processes (the latter character is unique for this genus) (Figs 268, 269).

***Subtiloria angusta* (Chopard, 1958)**
(Figs 259, 271, 272)

Holotype. ♂, San Tome I., "Sao Tome, 1500 m, au-dessus de Lagoa Amelia", 10-11.VI.1956, P. Vi-ette (MNHN).

Note. This specimen is very similar to all other congeners, but its tegmina are not strongly pubescent, with 7 distinct branches of *MP+CuA₁* at apical area of dorsal part (all other congeners with 5-6 distinct branches of this vein), and anal and genital plates as in Figs 271, 272 (genitalia are missing).

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