

New genera and species of Sepsidae (Diptera)

Новые роды и виды мух-муравьевидок (Diptera: Sepsidae)

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КЛЮЧЕВЫЕ СЛОВА: Diptera, двукрылые, Sepsidae, новые роды, новые виды.

ABSTRACT. Two new genera: *Afronemopoda* gen.n. (type-species: *Nemopoda ealaensis* Vanschuytbroeck, 1962), and *Lateosepsis* gen.n. (type-species: *Sepsis laticornis* Duda, 1926) and 17 new species: *Archisepsis bolivica* sp.n. from Bolivia, *Meroplus curvispinifer* sp.n. from Namibia, *Palaeosepsioides marshalli* sp.n. from Bolivia, *P. neotropicanus* sp.n. from Costa Rica and Panama, *Palaeosepsis bucki* sp.n. from Bolivia, Ecuador and Venezuela, *P. eberhardi* sp.n. from Costa Rica, *P. golovastik* sp.n. from Ecuador, *P. morula* sp.n. from Costa Rica and Honduras, *P. punctulata* sp.n. from Bolivia and Ecuador, *Parapalaeosepsis ploskolapka* sp.n. from Australia, *Paratoxopoda abyssinica* sp.n. from Ethiopia, *Sepsis africana* sp.n. from Cameroon, Ethiopia, Kenya, Malawi and Republic of South Africa (= RSA), *S. baringoensis* sp.n. and *S. kenya* sp.n. from Kenya, *S. lineolata* sp.n., *S. luteola* sp.n. and *S. stenocalyptata* sp.n. from RSA are described.

РЕЗЮМЕ. Приведены описания 2 новых родов: *Afronemopoda* gen.n. (типовой вид: *Nemopoda ealaensis* Vanschuytbroeck, 1962) и *Lateosepsis* gen.n. (типовой вид: *Sepsis laticornis* Duda, 1926) и 17 новых видов: *Archisepsis bolivica* sp.n. из Боливии, *Meroplus curvispinifer* sp.n. из Намибии, *Palaeosepsioides marshalli* sp.n. из Боливии, *P. neotropicanus* sp.n. из Коста-Рики и Панамы, *Palaeosepsis bucki* sp.n. из Венесуэлы, Боливии и Эквадора, *P. eberhardi* sp.n. из Коста-Рики, *P. golovastik* sp.n. из Эквадора, *P. morula* sp.n. из Гондураса и Коста-Рики, *P. punctulata* sp.n. из Боливии и Эквадора, *Parapalaeosepsis ploskolapka* sp.n. из Австралии, *Paratoxopoda abyssinica* sp.n. из Эфиопии, *Sepsis africana* sp.n. из Камеруна, Кении, Малави, Эфиопии и Южно-Африканской Республики (= ЮАР), *S. baringoensis* sp.n. и *S. kenya* sp.n. из Кении, *S. lineolata* sp.n., *S. luteola* sp.n. и *S. stenocalyptata* sp.n. из ЮАР.

Introduction

The present work is based on the material of Sepsidae from Instituto Nacional de Biodiversidad, Santo Domingo, Costa Rica: Heredia (INBC), Museo Nacional de Historia Natural, La

Paz, Bolivia (MNHNB), Namibian National Museum, Windhoek, Namibia (NNMW), Natal Museum, Pietermaritzburg, South Africa (NMP), National Museum of Natural History, Washington, USA (NMNH), Tel-Aviv University, Tel-Aviv, Israel (TAU), and University of Guelph, Guelph, Canada (UGG). Besides this, the lectotypes of *Sepsis dentatiformis* Duda and *Sepsis maculata* Duda from Museum für Naturkunde an der Humboldt-Universität, Berlin, Germany (ZMHUB) were studied. The part of paratypes are deposited in the Zoological Museum, Moscow, Russia (ZMUM).

Taxonomy

AFROTROPICAL REGION

Genus *Afronemopoda* Ozerov, gen.n.

Gender: feminine.

Type-species: *Nemopoda ealaensis* Vanschuytbroeck, 1962.

DESCRIPTION. Head roundish. Frons bare, without hairs. Occipital sclerite with several setae. Arista bare. Chaetotaxy: 1 *or*, 1 *oc*, 1 *po*, 1 *ivt* and 1 *ovt*. 1 short vibrissa.

Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+1 *dc*. Anepisternum with 1 thin seta near posterior margin. Katepisternum without setae. Mediotergite greyish pruinose, but shining near abdomen. Scutellum convex on dorsal surface, without hairs; with well-developed apical setae, basal setae short, hair-like. Metepimeral bridge absent: posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Coxa of midleg bare in upper half. Tibia of hindleg of male with a hardly visible osmeterium-like area.

Wing normal, longer than abdomen, with well-developed anal lobe. Cells of wing *bm* and *br* separate. Anal vein ending before wing margin. Alula entirely covered with microtrichia; width of alula approximately 2 times as long as wide cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen shining, not constricted after syntergite 1+2. Sternite 4 of male with tufts of hairs.

Surstyli symmetrical, fused with epandrium. Epandrial process absent.

DIAGNOSIS. The new genus differs from the close genus *Nemopoda* Robineau-Desvoidy by lacking of setae on coxa of midleg, pruinose mediotergite and absence of setae on kateisternum.

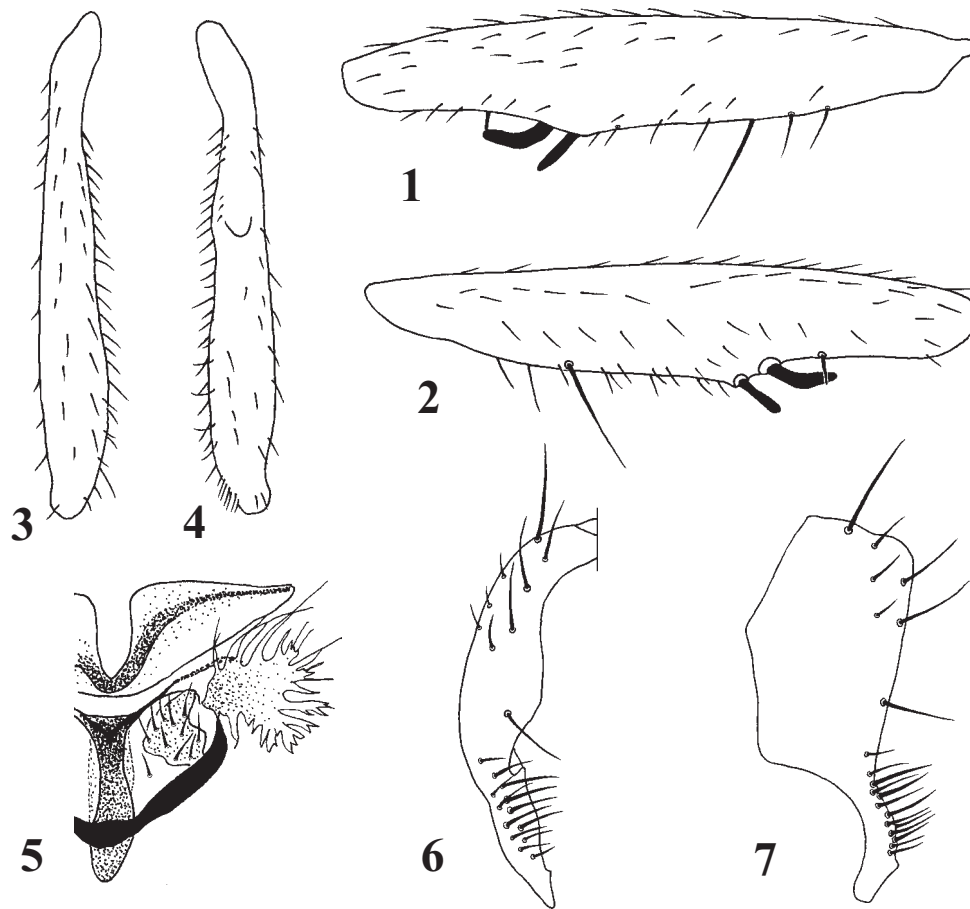


Fig. 1. *Meroplius curvispinifer* sp.n., ♂: 1 — fore femur (left), posterior view; 2 — fore femur (left), anterior view; 3 — fore tibia (left), posterior view; 4 — fore tibia (left), anterior view; 5 — abdominal sternites 4 and 5; 6 — epandrium and surstylus (left), lateral view; 7 — epandrium and surstylus (left), dorsal view.

Рис. 1. *Meroplius curvispinifer* sp.n., ♂: 1 — бедро передней левой ноги, сзади; 2 — бедро передней левой ноги, спереди; 3 — голень передней левой ноги, сзади; 4 — голень передней левой ноги, спереди; 5 — стерниты IV и V брюшка; 6 — эпандрий и сурстиль (левый), сверху; 7 — эпандрий и сурстиль (левый), сбоку.

Meroplius curvispinifer Ozerov, sp.n.

Fig. 1: 1–7.

TYPE-MATERIAL. Holotype ♂, "Namibia: W. Caprivi Park[,] B8 rest stop at 17°48'56"S 24°16'31"E[,] 13–15.XII.1999[,] Marais, Mann & Newman[,] MMN3 — Elephant dung" (NNMW). Paratypes: 1 ♂, 2 ♀♀, with same label as holotype (NNMW, ZMUM).

DESCRIPTION. Length of body 2.4–3.3 mm. Length of wing 1.9–2.4 mm.

Male. *Colour*. Frons black, in apical half brownish. Face, clypeus, gena and postgena yellow. Postcranium black. Antenna yellowish, but postpedicel darkened along anterior margin. Thorax black. Legs black, but coxa and trochanter of all legs, femur and tibia of foreleg, femora of midleg and hindleg in basal third or half, and basitarsus of foreleg in basal half or almost completely yellow. Wing clear, but basal-costal cell completely and costal cell in basal half blackish. Veins brown. Calypters, their margins and halter whitish. Abdomen black.

Pollinosity. Frons shining, with longitudinal stripe of thin pollen in centre below ocellar triangle. Face, gena and postcranium thinly pruinose. Scutum (including postpronotal lobe) greyish pruinose. Proepisternum greyish pruinose. Proepimeron shining,

with narrow stripe of whitish pollen along lower margin. Anepisternum shining. Katapisternum shining, only along upper margin greyish pruinose. Anepimeron shining in posterior half and greyish pruinose in anterior half; anepimeral process shining, but anepimeral ampulla greyish pruinose. Katepimeron, meron and metepimeron completely shining. Metepisternum shining, with spot of whitish pollen near posterior margin. Katatergite and anatergite greyish pruinose. Mediotergite greyish pruinose, with small shining spot under subscutellum. Scutellum and subscutellum greyish pruinose. Abdomen shining.

Head. Head in lateral view slightly flattened dorsoventrally: longer than high. Height of gena below eye approximately 1/6 times as long as vertical diameter of eye. Eye roundish. Postpedicel in profile oval, slightly longer than wide. Chaetotaxy: 1oc, 1or, 1poc, 1ivt, 1ovt. Occipital sclerite with several setae in centre. 1 vibrissa.

Thorax. Scutum with the following paired setae: 1pprn, 2npl, 1spal, 1pal, 0+1dc. Anepisternum in posterior half with short hairs and a seta near posterior margin. Scutellum with well-developed apical setae, basal setae very short, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg with 1 apicald. Fore femur and tibia as in Fig. 1: 1–4. Femora of midleg and hindleg without striking

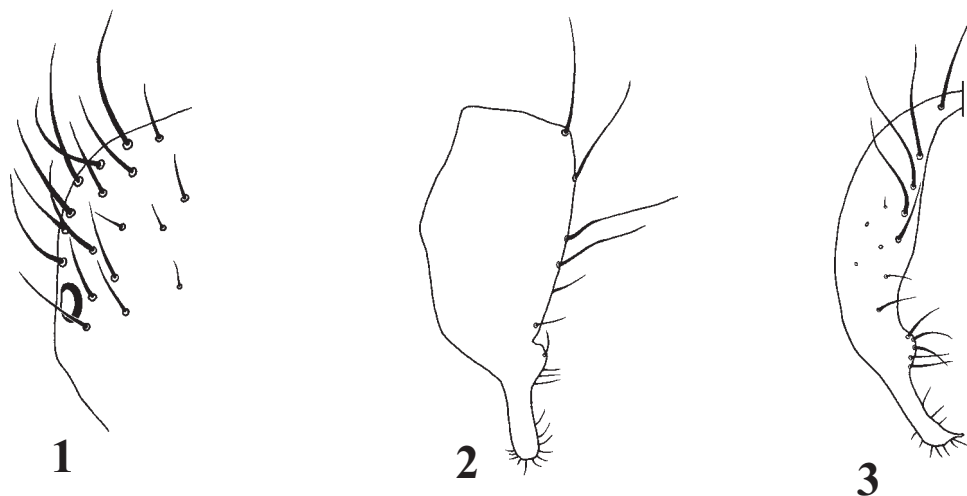


Fig. 2. *Paratoxopoda abyssinica* sp.n., ♂: 1 — lateral margin of abdominal tergite 5; 2 — epandrium and surstylus (left), lateral view; 3 — epandrium and surstylus (left), dorsal view.

Рис. 2. *Paratoxopoda abyssinica* sp.n., ♂: 1 — боковой край тергита V брюшка; 2 — эпандрий и сурстиль (левый), сбоку; 3 — эпандрий и сурстиль (левый), сверху.

setae. Tibia of midleg with 1 *av* in apical third and apical *av* and *v*. Tibia of hindleg with osmeterium in basal half anterodorsally, with 1 small preapical *d*.

Wing normal, longer than abdomen. Cells *bm* and *br* separate. Alula entirely covered with microtrichia, its width approximately 1.5 times as long as wide cell *bm*. Margin of upper calypter with long hairs. Margin of lower calypter without hairs.

Abdomen not constricted after syntergite 1+2. Tergites 4 and 5 with several thin marginal setae. Sternites 4 and 5 as in Fig. 1: 5. Epandrium and surstyli as in Fig. 1: 6, 7. Surstyli symmetrical, fused to epandrium.

Female. Resembles male.

DIAGNOSIS. Resembles *Meroplus hastifer* Séguéy, 1938, from which differs by the structure of foreleg and male genitalia.

Paratoxopoda abyssinica Ozerov, sp.n.

Fig. 2: 1–3.

TYPE-MATERIAL. Holotype ♂, "ETHIOPIA: Shewa[,] Wendo Genet[,] 1900 m, 28.I.2000[,] A. Freidberg & I. Jarom" (TAU). Paratype ♂, with same label as holotype (ZMUM).

DESCRIPTION. Length of body 5.8–6.2 mm. Length of wing 4.1–4.2 mm.

Male. *Colour*. Frons blackish in upper half and reddish brown in lower half. Face yellow in upper part and reddish brown in lower part. Gena and antenna reddish brown. Postgena and clypeus black. Postcranium, thorax and abdomen black, with violet reflections. Legs and scutellum black. Wing clear, with brown veins. Basal-costal and costal cells blackish. Calypters and their margins blackish. Halter yellowish.

Pollinosity. Frons shining. Face and gena thinly greyish pruinose. Postcranium, thorax and abdomen subshining. Mediotergite subshining, with broad greyish pruinose on the border with anatergite. Scutellum matt.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/6 times as long as vertical diameter of eye. Postpedicel in profile long-oval, roundish apically, approximately 2.5 times as long as wide. Arista bare. 1 *oc*, 1 *poc*, 1 *ivt*; *ovt* and *ora* absent. Occipital sclerite bare. Postgena without setae near lower margin. 2–3 short vibrissae.

Thorax. Scutum with the following paired setae: 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Proepisternum with several hairs near lower margin. Anepisternum with a seta near posterior margin. Scutellum with well-developed apical setae, basal setae absent. Metepimeral bridge present: posteroventral area of thorax behind and above hind coxae between metepimera sclerotized.

Legs. Coxa of foreleg long and simple, with 1 apical *d*. Femur and tibia of foreleg simple, without striking hairs and setae. Coxa of midleg bare in upper half. Femur of midleg curved at middle, with hairs posterodorsally. Tibia of midleg with 1 *v* in apical quarter and with apical *d*, *av* and *pv*. Femur of hindleg without striking hairs and setae. Tibia of hindleg without osmeterium or osmeterium-like area, with 1 preapical *ad*.

Wing longer than abdomen, with well-developed anal lobe. Cells *bm* and *br* separate. Alula bare: without microtrichia; width of alula approximately 4 times as long as wide cell *bm*. Margins of upper and lower calypters with hairs.

Abdomen not constricted after syntergite 1+2, the latter near middle with thin hairs. Tergites without setae. Lateral margin of tergite 5 as in Fig. 2: 1. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 2: 2, 3.

Female. Unknown.

DIAGNOSIS. The new species is close to *P. depilis* (Walker, 1849) differing from it by the absence of yellow spots on abdominal tergites, by the absence of *av* near middle of tibia of hindleg, and by the structure of male genitalia.

Sepsis africana Ozerov, sp.n.

Fig. 3: 1–7.

TYPE-MATERIAL. Holotype ♂, "S[outh] Africa: E. Transvaal[,] 25 km ne. Ohrigstad[,] Echo Caves 2430DA[,] XII 6-7, 1976. R. Miller[,] Sewage-seepage area" (NMP). Paratypes: 2 ♂♂, CAMEROON: Province de l'Ouest (Foumbot), Massif du Nkogam, Plateau de Kounden, Mission Cameroun C.N.R.S, RCP 318, Octobre–Novembre 1975 (MNHNP, ZMUM); 3 ♂♂, ETHIOPIA: Shewa, Wendo Genet, 1900 m, 28.I.2000, A. Freidberg & I. Jarom (TAU, ZMUM); 1 ♂, ETHIOPIA: Gamo Gofa, Chencha, 40 km NW Arba Minch, 2800 m, 6.II.2001, I. Jarom & A. Freidberg (TAU); 4 ♂♂, KENYA: W Kakamega No 73, Kakamega Forest Reserve (00°22' N, 34°53' E), 1620 m, 24.XI.1992, A. Whittington & J. Londt

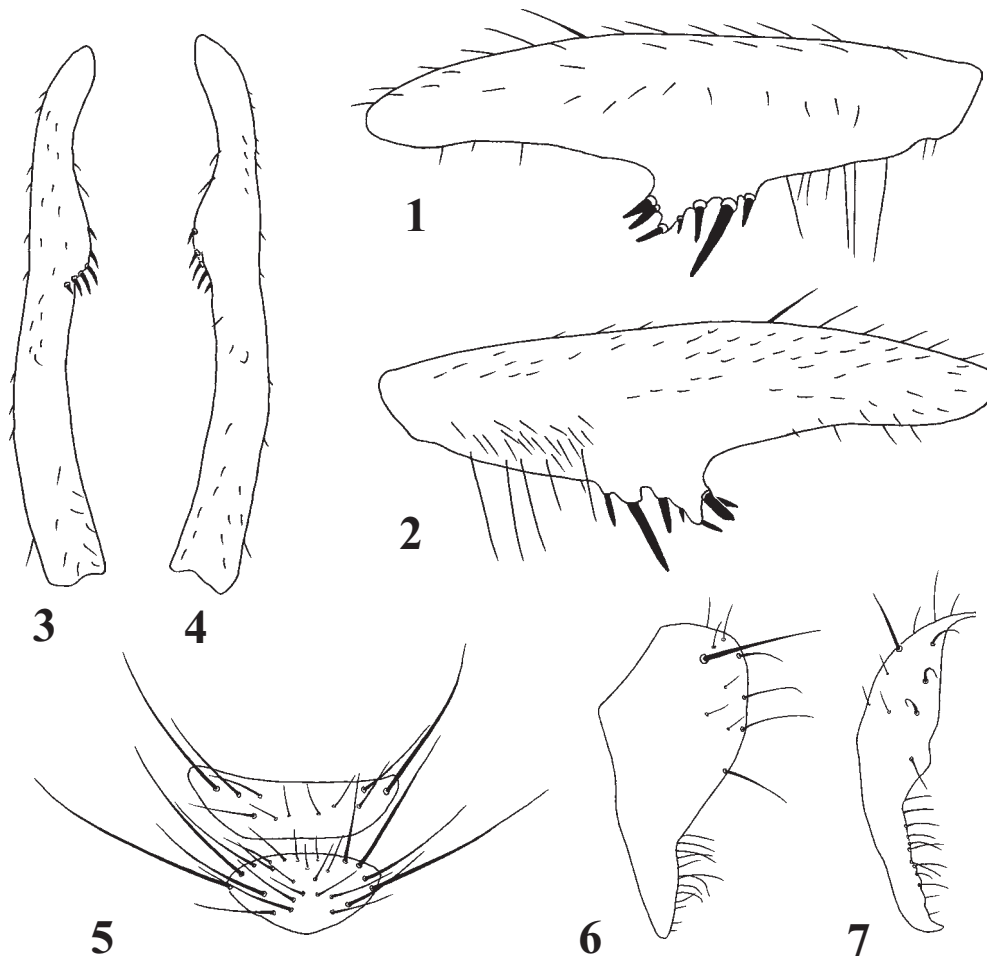


Fig. 3. *Sepsis africana* sp.n., ♂: 1 — fore femur (left), posterior view; 2 — fore femur (left), anterior view; 3 — fore tibia (left), posterior view; 4 — fore tibia (left), anterior view; 5 — abdominal sternites 4 and 5; 6 — epandrium and surstylus (left), lateral view; 7 — epandrium and surstylus (left), dorsal view.

Рис. 3. *Sepsis africana* sp.n., ♂: 1 — бедро передней левой ноги, сзади; 2 — бедро передней левой ноги, спереди; 3 — голень передней левой ноги, сзади; 4 — голень передней левой ноги, спереди; 5 — стерниты IV и V брюшка; 6 — эпандрий и сурстиль (левый), сбоку; 7 — эпандрий и сурстиль (левый), сверху.

(NMP, ZMUM); 1 ♂, KENYA: Kabarnet, 11–12.X.1998, F. Kaplan & A. Freidberg (TAU); 1 ♂, MALAWI: Ntchisi Forest reserve 1334Ac, 1500 m, 3–4.XII.1980, Londt & Stuckenberg, Montane forest and woodland (NMP); 1 ♂, MALAWI: South Zomba Plateau, Trout Farm, 2–6.X.1998, F. Kaplan & A. Freidberg (TAU); 1 ♂, MALAWI: Center Ntchisi Forest, 1500–1700 m, 17–18.X.1998, F. Kaplan & A. Freidberg (TAU); 1 ♂ with same labels as holotype (ZMUM); 1 ♂, SOUTH AFRICA: Natal, Drakensberg Garden, Caravan Park ca 1750 m, (29°45' S, 29°15' E), 6–11.I.1988, JGH Londt, On Cassing flowers (NMP); 1 ♂, SOUTH AFRICA: Pretoria, Fountains, 23.I.1921, H.K. Munro (ZMUM); 1 ♂, SOUTH AFRICA: Natal, Zululand and Ndumu Game Reserve, 26.X.1972, M.E. Irvin (NMP); 1 ♂, SOUTH AFRICA: Transvaal, Kruger Park, 9.XII.1972, Timbavati River banks riparian bush — road S–39, B. & P. Stuckenberg (NMP); 1 ♂, SOUTH AFRICA: Albany, "Good Hope" Poultry Unit. (33°32'S, 26°34'E), 14.XII.1978, P.E. Hulley (NMP); 1 ♂, SOUTH AFRICA: Transkei, N The Haven, 24–25.VI.1979, R. Miller & P. Stabbins, indig. coastal bush (NMP).

DESCRIPTION. Length of body: 2.5–4.1 mm. Length of wing: 2.4–3.1 mm.

Male. Colour. Head, thorax and legs completely yellow to blackish. Most of the specimens studied has head, pleural

sclerites and legs yellow, scutum yellow with dark median stripe. Wing tinged with brownish, without dark spot near apex. Basal-costal cell completely and costal cell in basal half blackish. Calypters and their margins yellowish-grey. Halter yellowish. Abdominal tergites black completely or partly: yellow at sides and in anterior half; epandrium yellow.

Pollinosity. Frons shining. Face and gena subshining. Postcranium very thin greyish pruinose, only along eye in upper half shining. Scutum greyish pruinose. Proepisternum, proepimeron, anepisternum and anepimeron shining. Katepisternum shining, but in upper posterior corner greyish pruinose. Katepimeron, meron and metepisternum thinly greyish pruinose. Metepimeron shining. Katatergite and anatergite greyish pruinose. Mediotergite shining. Scutellum greyish pruinose. Subscutellum shining. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/8 times as long as vertical diameter of eye. Postpedicel in profile long-oval, approximately 1.5 times as long as wide, roundish apically. 1 *oc*, 1 *poc*, 1 *ivt*, 1 *ovt*; or absent. Occipital sclerite with several setulae. Gena with a row of setulae along lower margin. Postgena without a seta near lower margin. 2–3 vibrissae. Arista bare.

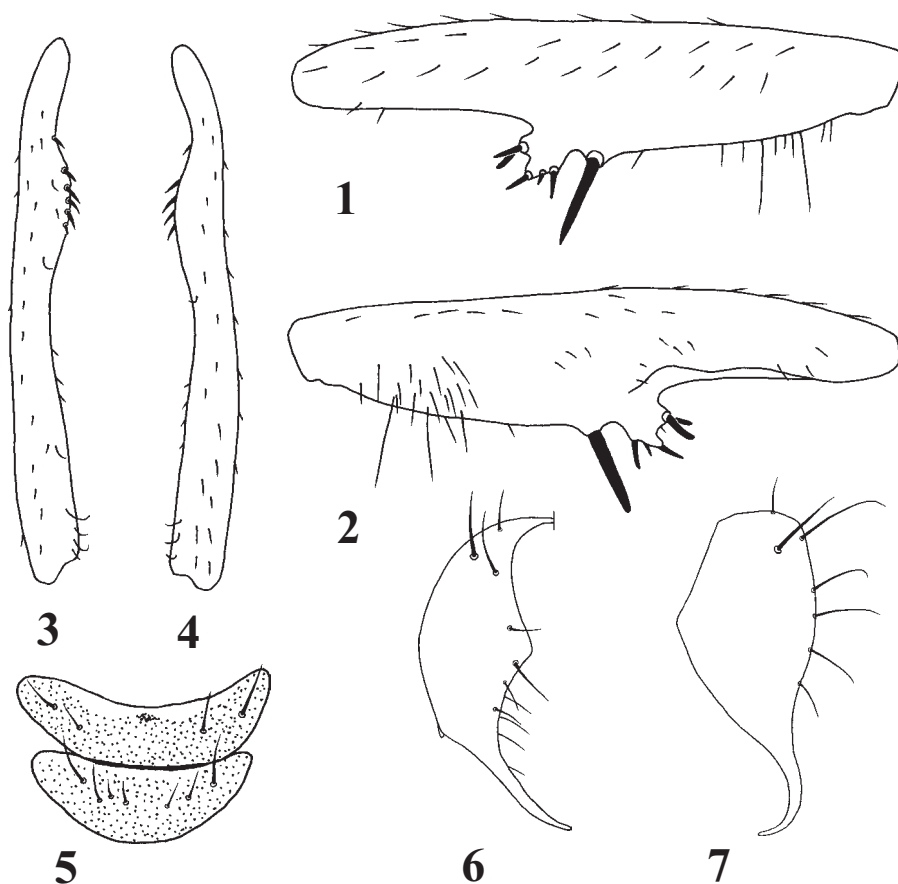


Fig. 4. *Sepsis baringoensis* sp.n., holotype ♂: 1 — fore femur (left), posterior view; 2 — fore femur (left), anterior view; 3 — fore tibia (left), posterior view; 4 — fore tibia (left), anterior view; 5 — abdominal sternite 4 and 5; 6 — epandrium and surstylus (left), dorsal view; 7 — epandrium and surstylus (left), lateral view.

Рис. 4. *Sepsis kenica* sp.n., голотип ♂: 1 — бедро передней левой ноги, сзади; 2 — бедро передней левой ноги, спереди; 3 — голень передней левой ноги, сзади; 4 — голень передней левой ноги, спереди; 5 — стернит IV и V брюшка; 6 — эпандрий и сурстиль (левый), сверху; 7 — эпандрий и сурстиль (левый), сбоку.

Thorax. Postpronotal lobe and scutum bearing scattered hairs. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Anepisternum in posterior half bearing scattered hairs and with a long seta near posterior margin. Scutellum with well-developed apical setae; basal setae short, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg long and simple, without striking setae. Fore femur and tibia as in Fig. 3: 1–4. Coxa of midleg with a row of hairs in upper half. Femur of midleg with 1–4 (usually with 2) *stronga* in centre. Tibia of midleg with 1 *strongv* in apical third, with 2–3 *p*, with 1 preapical *d*, with apical *pv* and *av*. Femur of hindleg with 1 *ad* in apical quarter. Tibia of hindleg with osmeterium-like area anterodorsally near middle, with 1 *ad* and 1 *pd* at middle, with 1 preapical *d* and apical *a*.

Wing normal, longer than abdomen, with well-developed anal lobe. Cells *bm* and *br* separate. Alula entirely covered with microtrichia; width of alula approximately 2 times as long as wide cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen with constricted after syntergite 1+2, the latter at sides with several thin setae. Tergites 3 and 4 each with 4 marginal setae, tergite 5 with 2 dorsal marginal setae. Sternites 4 and 5 as in Fig. 3: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 3: 6, 7.

Female. Unknown.

DIAGNOSIS. Resembles *Sepsis delectabilis* Adams, 1905, differing from it by the structure of abdominal sternites 4 and 5 and by more strong and long setae on surstylus.

Sepsis baringoensis Ozerov, sp.n.

Fig. 4: 1–7.

TYPE-MATERIAL. Holotype ♂, "KENYA: Baringo ♂ 65[,] 14 km East of Kabarnet[,] 00°28'N : 35°52'E 2000m[,] Date: 21.XI.1992[,] A. Whittington & J. Londt[,] Dry indigenous forest (NMP).

DESCRIPTION. Length of body 3.2 mm. Length of wing 2.2 mm.

Male. Colour. Frons dark brown. Face and gena yellow. Antennal grooves, postgena, clypeus and postcranium black. Antenna blackish, only postpedicel reddish basally. Coxa, femur and tibia of foreleg yellow. Femora of midleg and hindleg black, but basally yellow. Tibiae of midleg and hindleg black. Tarsomeres 1–3 of all legs yellow, tarsomeres 4 and 5 of all legs blackish. Wing clear. Basal-costal cell completely and costal cell in basal half blackish; veins brown. Upper calypter and its margin whitish, lower calypter and its margin darkened. Halter whitish. Abdomen black.

Pollinosity. Frons shining. Face, antennal grooves and gena greyish pruinose. Postcranium thinly greyish pruinose. Scutum, including postpronotal lobe, greyish pruinose, above notopleuron with shining spot. Proepisternum greyish pruinose in upper half and shining in lower half. Proepimeron shining and anepisternum shining. Katepisternum shining, with spot of greyish pollen in upper posterior corner. Anepimeron shining, with stripe of greyish pollen along posterior margin; anepimeral process, including anepimeral ampulla, shining. Meron, katepimeron, katatergite and anatergite greyish pruinose. Metepisternum greyish pruinose, but along posterior margin shining. Metepimeron and mediotergite shining. Scutellum greyish pruinose. Subscutellum shining. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/7 times as long as vertical diameter of eye. Postpedicel in profile long-oval, roundish apically, approximately 1.5 times as long as wide. Arista bare. *loc*, *1poc*, *1ivt*, *1ovt*; *or* absent. Occipital sclerite with several setae in centre; postgena without setae. 2–3 short vibrissae.

Thorax. Scutum with the following paired setae: *1pprn*, *2npl*, *1spal*, *1pal* (short, hair-like), *0+1dc*. Anepisternum with a seta near posterior margin. Scutellum with well-developed apical setae, basal setae very short, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg long and simple, with 1 *thind* in apical quarter. Fore femur and tibia as in Fig. 4: 1–4. Coxa of midleg with a row of short hair-like setae in upper half. Femur of midleg with *1a* in centre. Tibia of midleg with *1v* in apical half, with *2p* and with apical *av* and *pv*. Femur of hindleg with *1ad* in apical third. Tibia of hindleg with *1a* and *1pd* near middle, with 1 preapical *d* and 1 apical *ad*, with osmeterium-like area anterodorsally.

Wing normal, longer than abdomen, with well-developed anal lobe. Cells *sbm* and *br* separate. Alula entirely covered with microtrichia; width of alula approximately 2 times as long as wide cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen constricted after syntergite 1+2, the latter at sides with several setae. Tergites 3–5 each with 2 marginal setae. Sternites 4 and 5 as in Fig. 4: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 4: 6, 7.

Female. Unknown.

DIAGNOSIS. The new species can be recognised from close *Sepsis pronodosa* Speiser, 1924 by having metepisternum almost wholly pruinose, also by the structure of male foreleg and genitalia.

Sepsis kenyae Ozerov, **sp.n.**

Fig. 5: 1–7.

TYPE-MATERIAL. Holotype ♂, “KENYA: W Kakamega ♂ 73[,] Kakamega Forest Reserve[,] 00°22' N : 34°53' E 1620m[,] Date: 24.XI.1992[,] A. Whittington & J. Londt[,] Indigenous forest paths”(NMP).

DESCRIPTION. Length of body 3.1 mm. Length of wing 2.5 mm.

Male. Colour. Frons dark brown. Face blackish. Gena yellow. Postgena, clypeus and postcranium black. Antenna blackish. Coxa, femur and tibia of foreleg yellow. Femora of midleg and hindleg black, but basally and near apex yellow. Tibia of midleg yellow, in basal third blackish. Tibia of hindleg black, in apical third yellowish. Tarsomeres 1–4 of all legs yellow, fifth tarsomere of all legs blackish. Wing clear. Basal-costal cell completely and costal cell in basal half blackish; veins brown. Calypters and their margins darkened. Halter whitish. Abdomen black.

Pollinosity. Frons shining. Face, antennal grooves and gena greyish pruinose. Postcranium thinly greyish pruinose. Scutum shining, with longitudinal stripe of greyish pollen between *dc*. Proepisternum, proepimeron and anepisternum shining. Katepisternum shining, with spot greyish pollen in upper posterior corner. Anepimeron shining, with stripe of greyish pollen along posterior margin; anepimeral process, including anepimeral ampulla, shining. Meron, katepimeron, katatergite and anatergite greyish pruinose. Metepisternum greyish pruinose, but along posterior margin shining. Metepimeron and mediotergite shining. Scutellum greyish pruinose. Subscutellum shining. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/7 times as long as vertical diameter of eye. Postpedicel in profile long-oval, roundish apically, approximately 1.5 times as long as wide. Arista bare. *loc*, *1poc*, *1ivt*, *1ovt*; *or* absent. Occipital sclerite with several setae in centre; postgena without setae. 2–3 short vibrissae.

Thorax. Scutum with the following paired setae: *1pprn*, *2npl*, *1spal*, *1pal* (short, hair-like), *0+2dc*. Anepisternum with a seta near posterior margin. Scutellum with well-developed apical setae, basal setae very short, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg long and simple, with 1 *thind* in apical quarter. Fore femur and tibia as in Fig. 5: 1–4. Coxa of midleg with a row of short hair-like setae in upper half. Femur of midleg with 4–*5a* in apical half. Tibia of midleg with *1v* in apical half, with *2p* and with apical *av* and *pv*. Femur of hindleg with *1ad* in apical third. Tibia of hindleg with *1a* and *1pd* near middle, with 1 preapical *d* and with apical *ad*, with osmeterium-like area anterodorsally.

Wing normal, longer than abdomen, with well-developed anal lobe. Cells *sbm* and *br* separate. Alula entirely covered with microtrichia; width of alula approximately 2 times as long as wide cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen constricted after syntergite 1+2, the latter at sides with several setae. Tergites 3–5 each with 2 marginal setae. Sternites 4 and 5 as in Fig. 5: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 5: 6, 7.

Female. Unknown.

DIAGNOSIS. Resembles *Sepsis kalongensis* Vanschuytbroeck, 1963, from which differs by the structure of foreleg and male genitalia.

Sepsis lineolata Ozerov, **sp.n.**

Fig. 6: 1–7.

TYPE-MATERIAL. Holotype ♀, “So[uth] Africa: Natal, 20 km SE Nkandla[,] 2831Ca[,] Nkandla Forest Res.[,] 26.I.1980 for[est] margin[,] R. Miller & P. Stabbins”(NMP).

DESCRIPTION. Length of body 3.5 mm. Length of wing 2.6 mm.

Male. Colour. Head reddish yellow. Antenna reddish yellow, but postpedicel blackish. Thorax reddish yellow; scutum with dark indistinct band along line *ac* in front of transverse suture and along lines *dc* behind transverse suture. Legs yellow, tarsomeres 4 and 5 of all legs black. Wing with very light brownish tinge, with brownish spot near apex R_{2+3} . Basal-costal cell blackish; veins brown. Calypters and their margins greyish. Halter yellow. Abdomen black, but tergite 4 in posterior half and tergite 5 completely yellow. Epandrium and surstyli yellow.

Pollinosity. Frons, gena and postgena shining. Face and antennal grooves greyish pruinose. Median occipital sclerite whitish pruinose, occipital sclerite subshining. Scutum, includ-

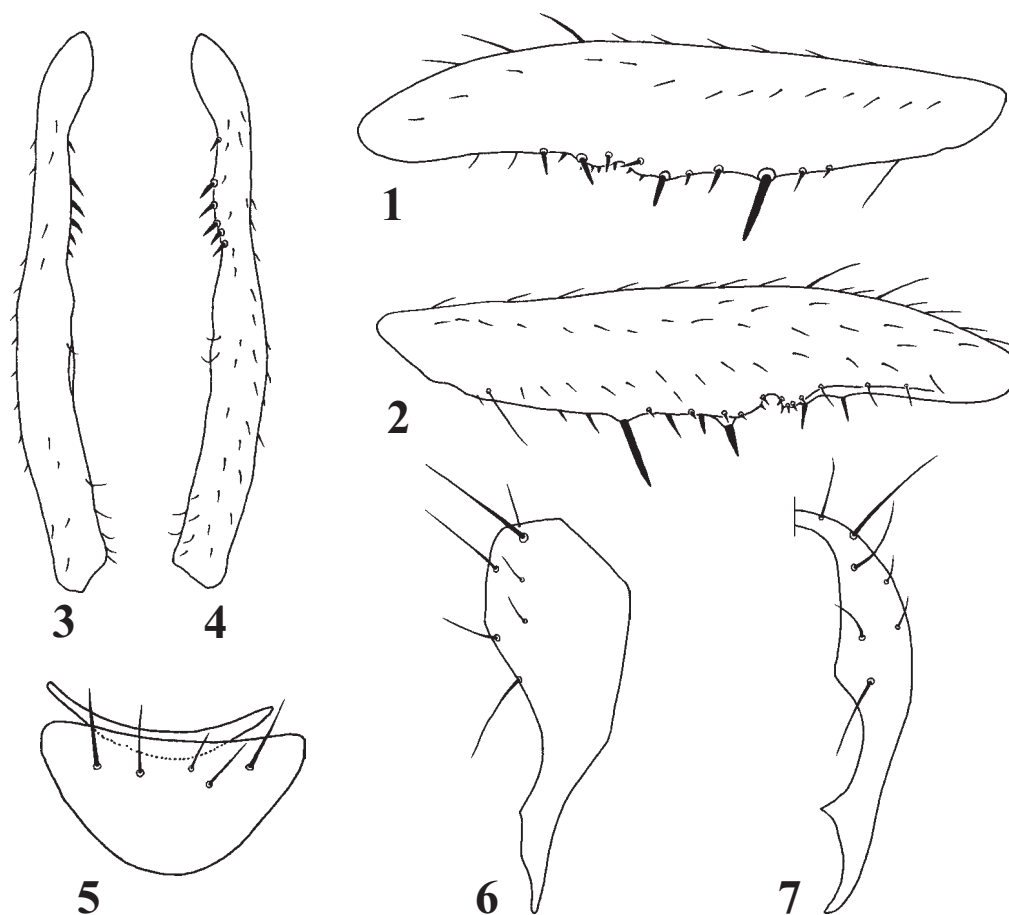


Fig. 5. *Sepsis kenyae* sp.n., holotype ♂: 1 — fore femur (left), posterior view; 2 — fore femur (left), anterior view; 3 — fore tibia (left), posterior view; 4 — fore tibia (left), anterior view; 5 — abdominal sternite 4 and 5; 6 — epandrium and surstylus (right), dorsal view; 7 — epandrium and surstylus (right), lateral view.

Рис. 5. *Sepsis kenyae* sp.n., голотип ♂: 1 — бедро передней левой ноги, сзади; 2 — бедро передней левой ноги, спереди; 3 — голень передней левой ноги, сзади; 4 — голень передней левой ноги, спереди; 5 — стернит IV и V брюшка; 6 — эпандрий и сурстиль (правый), сверху; 7 — эпандрий и сурстиль (правый), сбоку.

ing postpronotal lobe, subshining, but behind dorsocentral setae thinly greyish pruinose. Proepisternum, proepimeron, anepisternum, anepimeron, including anepimeral process and anepimeral ampulla, meron, katepimeron, metepisternum and metepimeron shining. Katepisternum shining, with spot silvery-white pollen in upper posterior corner. Katatergite and anatergite greyish pruinose. Mediotergite shining. Scutellum thinly greyish pruinose. Subscutellum shining. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/6 times as long as vertical diameter of eye. Postpedicel in profile long-oval, roundish apically, approximately 1.7 times as long as wide. Arista bare. 1 *oc*, 1 *poc*, 1 *ivt*, 1 *ovt*; *ora* absent. Occipital sclerite with several setae in centre. Postgena without setae near lower margin. 2 short vibrissae.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Anepisternum with a seta near posterior margin. Scutellum with well-developed apical setae, basal setae very short, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg long and simple, with 1 *d* in apical quarter. Fore femur and tibia as in Fig. 6: 1–4. Femur of foreleg with thin hairs anteroventrally basally. Coxa of midleg with a row of short hair-like setae in upper half. Femur of midleg with 2–3 *a* near middle and with 2 *ad* in apical quarter. Tibia of midleg

with 1 *av* in apical half, with 3 *p* and with apical *d*, *av* and *pv*. Femur of hindleg with 2–3 *ad* and 1 *pd* in apical quarter. Tibia of hindleg with osmeterium-like area in apical half anterodorsally, with 1 *pd* and 1 *v* in centre, with 2 *ad* in apical half, with 1 short preapical *d* and 1 apical *a*.

Wing normal, longer than abdomen, with well-developed anal lobe. Cells *bm* and *br* separate. Alula entirely covered with microtrichia; width of alula approximately 2 times as long as wide cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen constricted after syntergite 1+2, the latter at sides with 1 seta. Tergites 3 and 4 each with 4 setae. Tergite 5 with 2 setae. Sternite 4 as in Fig. 6: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 6: 6, 7.

Female. Unknown.

DIAGNOSIS. Resembles *Sepsis validiseta* Duda, 1926, differing from it by the structure of male foreleg and genitalia.

Sepsis luteola Ozerov, **sp.n.**

Fig. 7: 1–7.

TYPE-MATERIAL. Holotype ♂, "South Africa: Natal[,] Ngoye Forest Reserve ca 28°51'S : 34°44'E[,] Coast Scarp For.

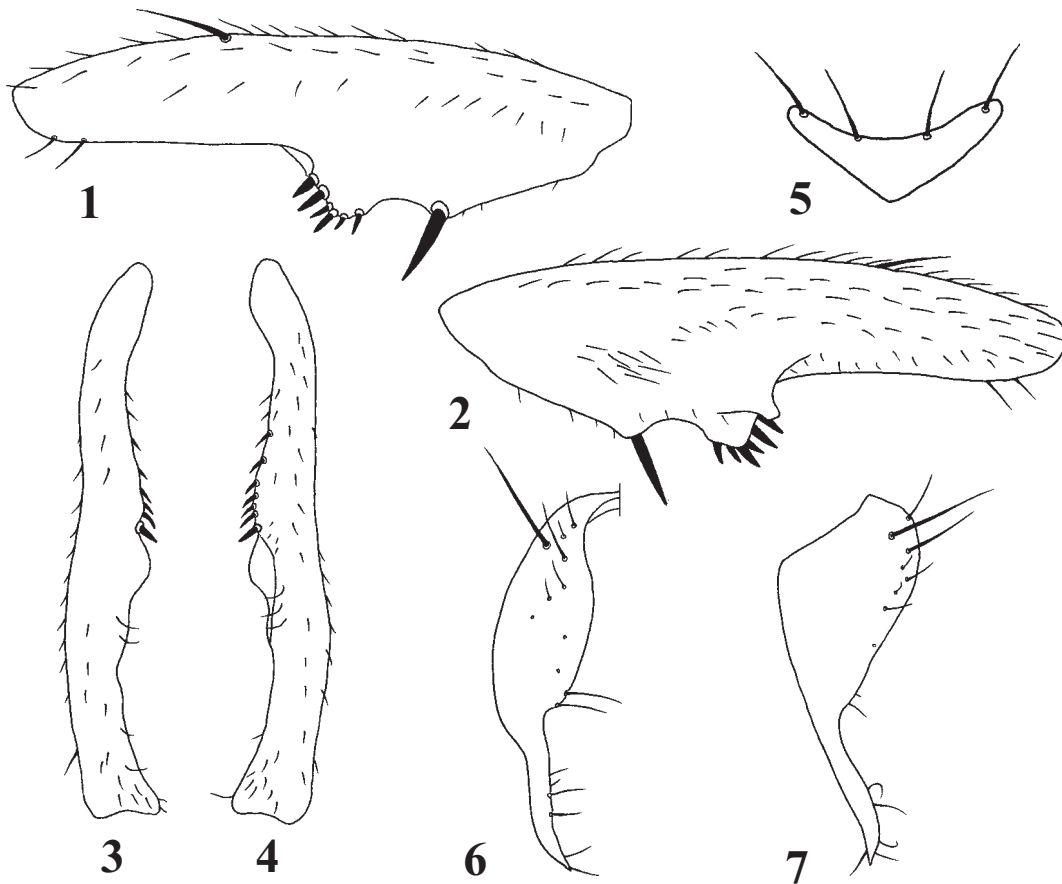


Fig. 6. *Sepsis lineolata* sp.n., holotype ♂: 1 — fore femur (left), posterior view; 2 — fore femur (left), anterior view; 3 — fore tibia (left), posterior view; 4 — fore tibia (left), anterior view; 5 — abdominal sternite 4; 6 — epandrium and surstylus (left), dorsal view; 7 — epandrium and surstylus (left), lateral view.

Рис. 6. *Sepsis lineolata* sp.n., голотип ♂: 1 — бедро передней левой ноги, сзади; 2 — бедро передней левой ноги, спереди; 3 — голень передней левой ноги, сзади; 4 — голень передней левой ноги, спереди; 5 — стернит IV брюшка; 6 — эпандрий и сурстиль (левый), сверху; 7 — эпандрий и сурстиль (левый), сбоку.

250 m[.] 29.I.1988[.] J. Londt' (NMP). Paratypes: 3 ♂♂, with same label as holotype (NMP, ZMUM).

DESCRIPTION. Length of body 2.6–2.8 mm. Length of wing 2.0–2.1 mm.

Male. Colour. Head yellow, only median occipital sclerite blackish. Antenna yellow, pedicel and postpedicel slightly darkened along upper margin. Thorax yellow, but scutum with blackish spot in centre behind transverse suture, postalar callus and subscutellum blackish, scutellum in basal half darkened. Legs yellow, fifth tarsomere of all legs darkened. Wing with light brownish tinge, with big brownish spot at tip of vein R_{2+3} . Basal-costal cell completely and costal cell in basal half black; veins brown. Calypters and their margins brownish. Halter yellowish. Abdomen yellow, but tergites 3 and 4 almost completely black. Epandrium and surstyli yellow.

Pollinosity. Frons, gena and postgena shining. Face, antennal grooves and postcranium thinly greyish pruinose. Scutum, including postpronotal lobe, very thinly (hardly visible) greyish pruinose. Proepisternum, proepimeron and anepisternum shining. Katepisternum shining, but along posterior margin and in upper posterior corner silvery-greyish pruinose. Anepimeron, including anepimeral process and anepimeral ampulla, shining. Meron, katepimeron and metepisternum greyish pruinose. Metepimeron shining. Katatergite and anatergite

thinly greyish pruinose. Mediotergite shining. Scutellum greyish pruinose. Subscutellum shining. Abdomen shining.

Head and eye in lateral view slightly flattened dorsoventrally (holotype) or roundish. Height of gena below eye approximately 1/8 times as long as vertical diameter of eye. Postpedicel in profile long-oval, roundish apically, approximately 1.5 times as long as wide. Arista bare. *1oc*, *1poc*, *1ivt*, *1ovt*; *or* absent. Occipital sclerite with several setae in centre. Postgena without setae. 3 vibrissae.

Thorax. Scutum with the following paired setae: *1pprn*, *2npl*, *1spal*, *1pal*, *0+2dc*; with a row of short setulae along each *ac*, *dc* and *ial* line. Anepisternum with a seta near posterior margin. Scutellum with well-developed apical setae, basal setae very short, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg long and simple, with *1d* near apex. Fore femur and tibia as in Fig. 7: 1–4. Femur of foreleg with 1 hair-like *av* basally. Coxa of midleg with a row of short hair-like setae in upper half. Femur of midleg with 1–3 *a* near middle. Tibia of midleg with *1v* in apical half, with *2pd* in apical half and with apical *d*, *av* and *pv*. Femur of hindleg without setae. Tibia of hindleg with osmeterium-like area in basal half anterodorsally, with *1ad*, *1pd* and *1av* in centre, with 1 preapical *d* and with 1 apical *a*.

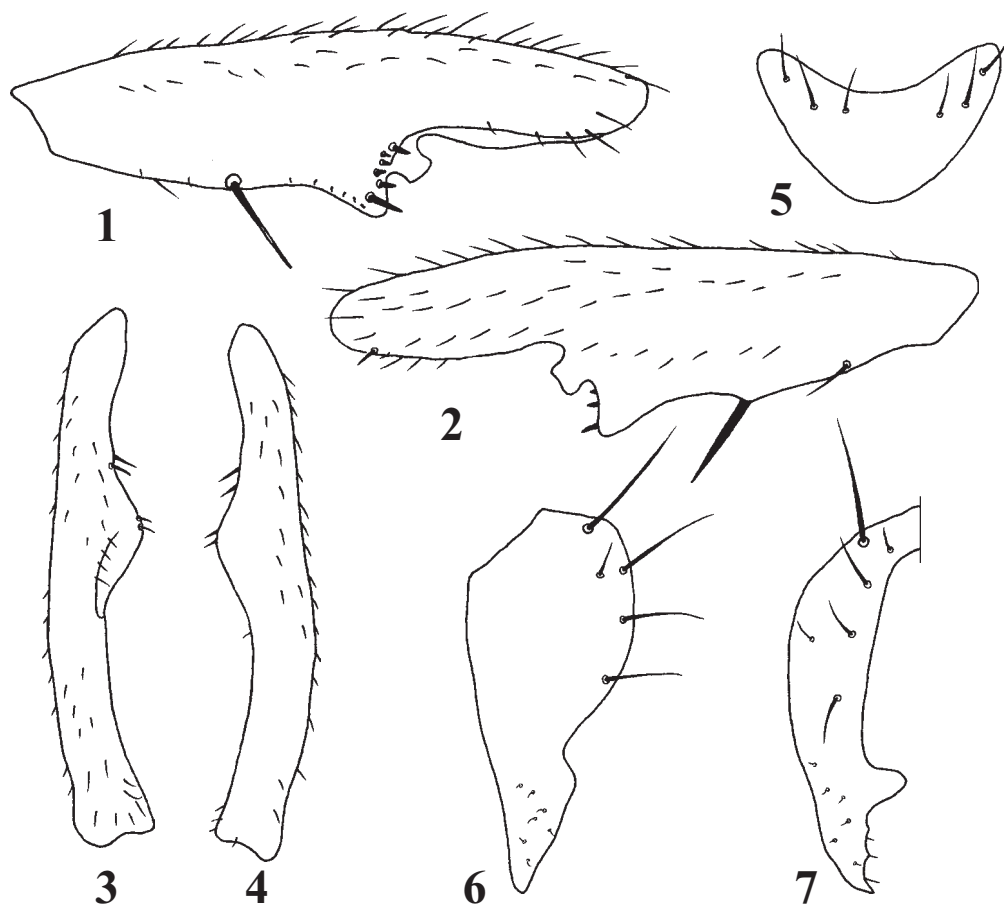


Fig. 7. *Sepsis luteola* sp.n., holotype ♂: 1 — fore femur (right), posterior view; 2 — fore femur (right), anterior view; 3 — fore tibia (right), anterior view; 4 — fore tibia (right), posterior view; 5 — abdominal sternite 4; 6 — epandrium and surstylus (left), lateral view; 7 — epandrium and surstylus (left), dorsal view.

Рис. 7. *Sepsis luteola* sp.n., голотип ♂: 1 — бедро передней правой ноги, сзади; 2 — бедро передней правой ноги, спереди; 3 — голень передней правой ноги, спереди; 4 — голень передней правой ноги, сзади; 5 — стернит IV брюшка; 6 — эпандрий и сурстиль (левый), сбоку; 7 — эпандрий и сурстиль (левый), сверху.

Wing longer than abdomen, with well-developed anal lobe. Cells *bm* and *br* separate. Alula entirely covered with microtrichia; width of alula approximately 2 times as long as wide cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen constricted after syntergite 1+2, the latter at sides with 1 seta. Tergites 3–5 each with 4 marginal setae. Sternite 4 as in Fig. 7: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 7: 6, 7.

Female. Unknown.

DIAGNOSIS. Resembles *Sepsis krocha* Ozerov, 2000, differing from it by completely shining anepimeron and absence of hairs on surstyli.

Sepsis stenocalyptrata Ozerov, sp.n.

Fig. 8: 1–8.

TYPE-MATERIAL. Holotype ♂, "S. AFRICA: Natal[,] ♂ 1[,] 3 km SE of van Reenen[,] Windy Corner[,] 1600 m[,] Date: 25.IV.1984[,] R. Miller & P. Stabbins" (NMP). Paratypes: 1 ♂, SOUTH AFRICA: E. Transvaal, 13 km W. Sabie 2530BB Horseshoe Falls, 4.XII.1976, R. Miller (ZMUM); 1 ♀, SOUTH AFRICA: Cape, ♂ 6, 2 km S of Grahamstown (33°20'S, 26°

31'E), 800 m, 20.XI.1990, Londt & Whittington, Dassie Knatz Forest (NMP); 1 ♀, SOUTH AFRICA: Natal: Gillitts, nr. Pinetown, 17.X.1976, 2930DD, Raymond M. Miller (ZMUM); 1 ♀, SOUTH AFRICA: Natal, s 45, Mhlatuzana, (18.XII.1990), (29°48'S, 30°45'E), 500 m, Reared out: 18.I.1991, coll: A.E. Whittington from *Hyrax faeces* (NMP).

DESCRIPTION. Length of body 3.5–4.5 mm. Length of wing 3.2–4.2 mm.

Male. Colour. Frons, face and antennal grooves dark brown. Gena and postgena yellow. Clypeus and postcranium black. Antenna blackish, only postpedicel reddish basally. Coxa, femur and tibia of foreleg yellow. Femur of midleg black, but basally yellow. Tibia of midleg black in basal half and yellow in apical half. Femur of hindleg yellow, with broad blackish ring in apical third. Tibia of hindleg blackish in basal half and yellowish in apical half. Tarsomeres 1 and 2 of all legs yellow, tarsomeres 3–5 of all legs blackish. Wing with light brownish tinge. Basal-costal cell completely and costal cell in basal half blackish; veins brown. Upper calypter and its margin whitish, lower calypter and its margin darkened. Halter whitish. Abdomen black.

Pollinosity. Frons shining. Face, antennal grooves and gena whitish pruinose. Postcranium thinly greyish pruinose. Scutum,

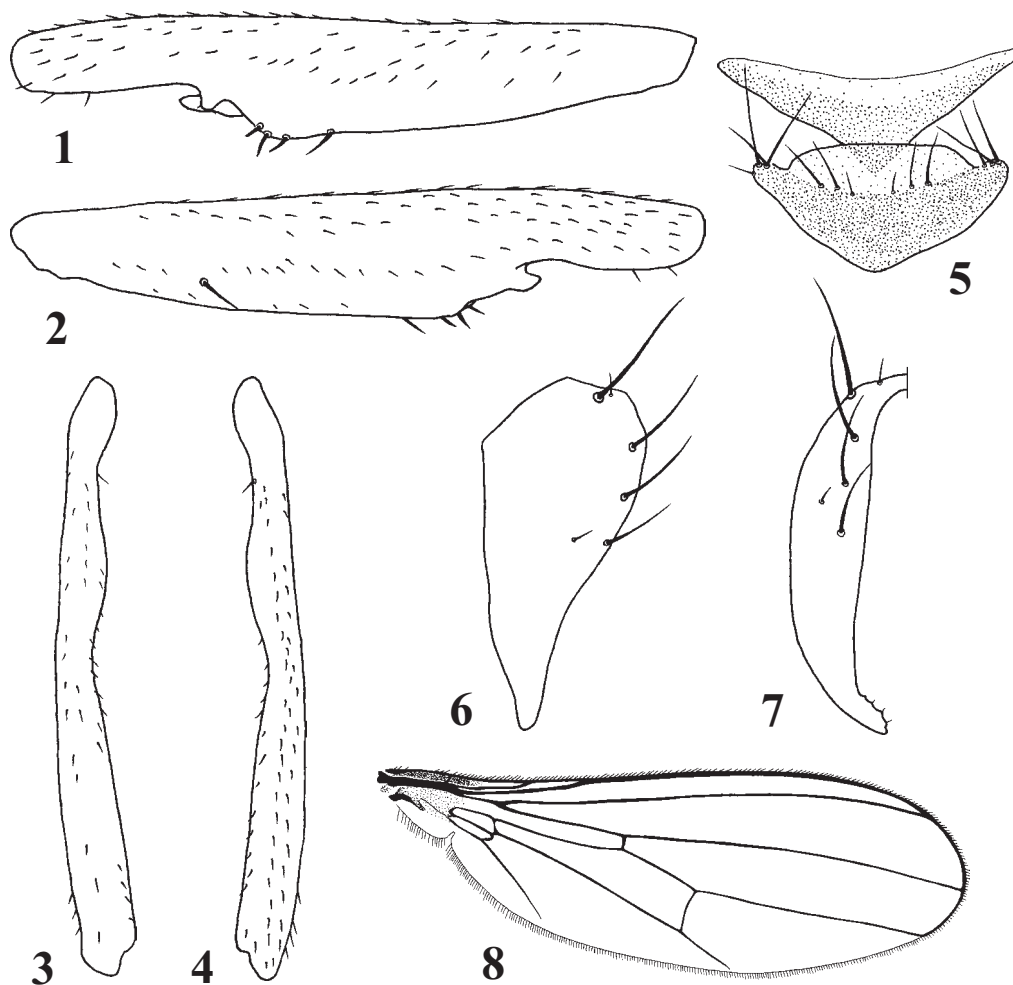


Fig. 8. *Sepsis stenocalyptrata* sp.n., ♂: 1 — fore femur (left), posterior view; 2 — fore femur (left), anterior view; 3 — fore tibia (left), posterior view; 4 — fore tibia (left), anterior view; 5 — abdominal sternites 4 and 5; 6 — epandrium and surstylus (left), lateral view; 7 — epandrium and surstylus (left), dorsal view.

Рис. 8. *Sepsis stenocalyptrata* sp.n., ♂: 1 — бедро передней левой ноги, сзади; 2 — бедро передней левой ноги, спереди; 3 — голень передней левой ноги, сзади; 4 — голень передней левой ноги, спереди; 5 — стерниты IV и V брюшка; 6 — эпандрий и сурстиль (левый), сбоку; 7 — эпандрий и сурстиль (левый), сверху.

including postpronotal lobe, greyish pruinose. Proepisternum greyish pruinose. Proepimeron shining, but along lower margin extensively greyish pruinose. Anepisternum shining, along posterior margin with very narrow stripe of greyish pollen. Katepisternum silvery-greyish pruinose completely. Anepimeron shining, with stripe of greyish pollen along posterior margin; anepimeral process, including anepimeral ampulla, greyish pruinose. Meron, katepimeron, metepisternum, metepimeron, katatergite and anatergite extensively greyish pruinose. Mediotergite shining, but greyish pruinose on the border with anatergite. Scutellum and subscutellum greyish pruinose. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/12 times as long as vertical diameter of eye. Postpedicel in profile long-oval, roundish apically, approximately 1.5 times as long as wide. Arista bare. 1 *oc*, 1 *poc*, 1 *ivt*, 1 *ovt*; *or* absent. Occipital sclerite with several setae in centre; postgena with 1 seta near lower margin. 3 short vibrissae.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal* (short, hair-like), 0+2 *dc*. Anepisternum with a seta near posterior margin. Scutellum with well-developed apical setae, basal setae very short, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg long and simple, with 1 *thind* in apical quarter. Fore femur and tibia as in Fig. 8: 1–4. Femur of foreleg with 1 *av* basally. Coxa of midleg with a row of short hair-like setae in upper half. Femora of midleg and hindleg without setae. Tibia of midleg with 1 *v* in apical half and with apical *av* and *pv*. Tibia of hindleg with osmeterium-like area anterodorsally.

Wing normal, longer than abdomen, with narrow anal lobe (Fig. 8: 8). Cells *bm* and *br* separate. Alula entirely covered with microtrichia, narrow: width of alula slightly more than width of cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen slightly constricted after syntergite 1+2. Tergites 3–5 each with 2 marginal setae. Sternites 4 and 5 as in Fig.

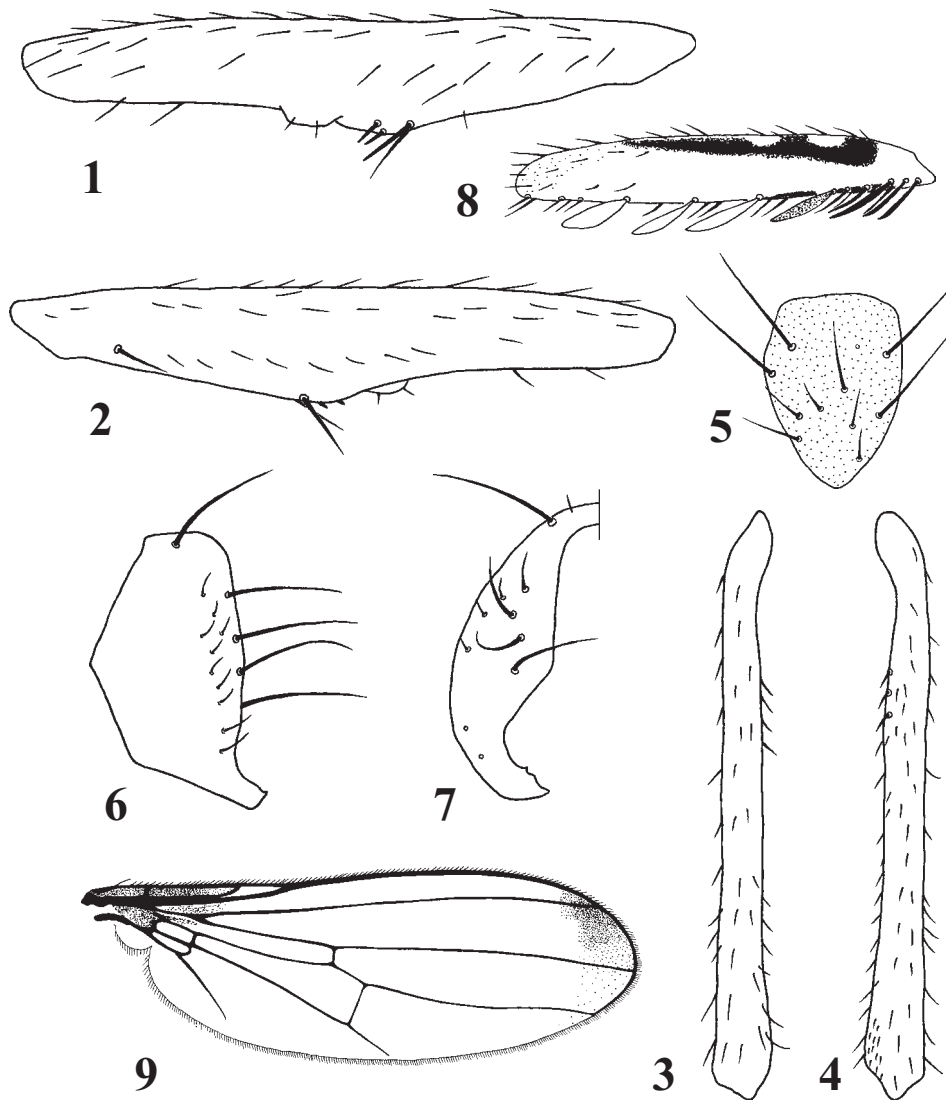


Fig. 9. *Parapalaeosepsis ploskolapka* sp.n., ♂: 1 — fore femur (left), posterior view; 2 — fore femur (left), anterior view; 3 — fore tibia (left), posterior view; 4 — fore tibia (left), anterior view; 5 — abdominal sternite 4; 6 — epandrium and surstylus (left), lateral view; 7 — epandrium and surstylus (left), dorsal view; 8 — basitarsus of midleg (left), posterior view; 9 — wing.

Рис. 9. *Parapalaeosepsis ploskolapka* sp.n., ♂: 1 — бедро передней левой ноги, сзади; 2 — бедро передней левой ноги, спереди; 3 — голень передней левой ноги, сзади; 4 — голень передней левой ноги, спереди; 5 — стернит IV брюшка; 6 — эпандрий и сурстиль (левый), сверху; 7 — эпандрий и сурстиль (левый), сбоку; 8 — членик I лапки средней левой ноги, сзади; 9 — крыло.

8: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 8: 6, 7.

Female. Resembles male, except for usual sexual differences.

DIAGNOSIS. Differs from other african species of *Sepsis* by narrow alula and anal lobe.

AUSTRALASIAN REGION

Parapalaeosepsis ploskolapka Ozerov, sp.n.

Fig. 9: 1–9.

TYPE-MATERIAL. Holotype ♂, "AUS[TRALIA] Qld., [= Queensland] Noosa Natl. Pk., Palm Trail, rain forest, 1400 m, sweeping, 5 Mar[ch] 1999, S.A. Marshall, debu00129337" (UGG). Paratypes: 1 ♂, AUSTRALIA: Queensland, Malanda, 3.5 km S,

760 m, 17°23'0 S, 145°36'0 E, rain forest, dung pitfall, 6–9 February 1999, G.B. Monteith, debu00159687 (ZMUM); 1 ♂, AUSTRALIA: Queensland, Lake Barrine Natl. Pk, Crater Lake, sweeping, 10 April 1999, S.A. Marshall, debu00121069 (UGG); 2 ♀♀, AUSTRALIA: Queensland, Kjellberg Rd. turnoff, 740 m, 17°32'0 S, 145°36'0 E, rain forest, dung pitfall, 6–9 February 1999, G.B. Monteith, debu00165354 and debu00165310 (UGG, ZMUM); 1 ♀, AUSTRALIA: Queensland, Maalan St. For., Ravenshoe Rd., 840 m, 17°35'0 S, 145°36'0 E, rain forest, dung pitfall, 6–9 February 1999, DJ. Cook, debu00159972 (UGG); 1 ♀, AUSTRALIA: Queensland, The Millstream, 10 km NNE Ravenshoe, 1040 m, 17°32'0 S, 145°31'0 E, rain forest, dung trap, 3–5 February 1999, Monteith & Cook, debu00162638 (UGG); 2 ♀♀, AUSTRALIA: Queensland, Noosa Natl. Pk., Palm Trail, rain forest, sweeping, 5 March 1999, S.A. Marshall, debu00120319 and debu00129189 (UGG); 2 ♀♀, AUSTRALIA: Queensland, Tolga Scrub, 760 m, 17°15'0 S, 145°29'0 E, rain

forest, dung pitfall, 3–6 February 1999, Monteith & Cook, debu00159589 and debu00160213 (UGG); 1 ♀, AUSTRALIA: Queensland, Ravenshoe, 7 km NE, 1080 m, 17°34'0 S, 145°31'0 E, wet sclerophyll, dung pitfall, 3–5 February 1999, Monteith & Cook, debu00160545 (UGG); 1 ♀, AUSTRALIA: Queensland, Mt. Hypipamee Natl. Pk., dung, 11 April 1999, S.A. Marshall, debu00122446 (UGG).

DESCRIPTION. Length of body 2.9–4.1 mm. Length of wing 2.3–3.1 mm.

Male. *Colour.* Frons black, rarely dark brown. Facial carina and gena yellow or brownish. Antennal grooves blackish. Postgena, clypeus and postcranium black. Antenna blackish, tinged with reddish. Thorax black, but postpronotal lobe, proepisternum, proepimeron and anterior margin of anepisternum usually yellowish. Coxa, femur and tibia of foreleg yellow. Femora of midleg and hindleg black, in basal quarter yellowish. Tibia of midleg yellowish, in apical third blackish, near apex white, with black semiring. Tibia of hindleg yellowish, in apical third blackish. Tarsi of all legs: tarsomeres 1–3 yellow (except basitarsus of midleg: Fig. 9: 8), tarsomeres 4 and 5 black. Wing clear, with big dark spot near apex R_{2+3} ; basal-costal and costal cells black; veins black (Fig. 9: 9). Calypters and their margins white. Halter white. Abdomen black.

Pollinosity. Frons and gena shining. Face and postcranium thinly greyish pruinose. Scutum greyish pruinose. Proepisternum and proepimeron extensively greyish pruinose. Anepisternum shining. Katepisternum shining in lower part and extensively greyish pruinose along upper margin and in upper posterior corner. Anepimeron, katepimeron, metepisternum, metepimeron, katatergite and anatergite extensively greyish pruinose. Mediotergite greyish pruinose, with shining spot near abdomen. Scutellum and subscutellum greyish pruinose. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/6 times as long as vertical diameter of eye. Postpedicel in profile oval, approximately 1.2 times as long as wide. 1 *oc*, 1 *poc*, 1 *ivt*, 1 *ovt*; or absent. Occipital sclerite with 1–2 setae. Gena along lower margin with a row of hair-like setae. Postgena with 1 seta. 2–3 vibrissae.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Anepisternum in posterior half bearing scattered hairs and with a long seta near posterior margin. Scutellum with well-developed apical setae, basal setae thin, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg long and simple, with 1 thin apical *d*. Fore femur and tibia as in Fig. 9: 1–4. Coxa of midleg bare in upper half. Femur of midleg with a row of short thina. Tibia of midleg without *av*, only with apical *av* and *pv*. Basitarsus of midleg strong flattened out, with flat setae along lower margin (Fig. 9: 8). Femur of hindleg without striking setae. Tibia of hindleg without striking setae, with osmeterium-like area anterodorsally.

Wing longer than abdomen, with more or less well-developed anal lobe. Cells *bm* and *br* separate. Anal vein almost reaching wing margin. Alula entirely covered with microtrichia; width of alula approximately 1.5 times as long as wide cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen strong constricted after syntergite 1+2, the latter at sides with 1–2 setae. Tergites with weak setulae. Sternite 4 as in Fig. 9: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 9: 6, 7.

Female. Resembles male. Femur of foreleg simple, tibia of hindleg without osmeterium-like area. Basitarsus of midleg simple.

DIAGNOSIS. The new species differs from close *Parapalaosepsis compressa* Zusk, 1970 by the presence of spot

on wing, by basally broader surstyli and broader basitarsus of male midleg. Wing of *P. compressa* without spot near apex (only slightly darkened along costal vein); basitarsus of male midleg is a little broader than the tibia of midleg.

NEOTROPICAL REGION

Genus *Lateosepsis* Ozerov, **gen.n.**

Gender: feminine.

Type-species: *Sepsis laticornis* Duda, 1926.

DESCRIPTION. Head roundish. Frons bare, without hairs. Occipital sclerite bare. Arista bare. Chaetotaxy: 1 *oc*, 1 *poc*, 1 *ivt* and 1 *ovt*; or absent. 2–3 short vibrissae.

Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Anepisternum with a seta near posterior margin. Katepisternum without setae. Mediotergite shining, but on the border with anatergite greyish pruinose. Scutellum dorsally convex, without hairs; apical setae well-developed, basal setae short, hair-like. Metepimeral bridge present.

Coxa of midleg in upper half bare. Tibia of hindleg of male with osmeterium-like area.

Wing normal, longer than abdomen. Anal vein almost reaching wing margin. Cells of wing *bm* and *br* separate. Alula entirely covered with microtrichia; width of alula approximately 2 times as long as wide cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen shining, not constricted after syntergite 1+2. Sternite 4 of male simple.

Surstyli present, symmetrical, fused with epandrium. Epandrial process absent.

DIAGNOSIS. The new genus differ by the following combination of characters: metepimeral bridge present; male abdominal sternite 4 simple; anal lobe of wing well-developed; width of alula approximately 2 times as long as wide cell *bm*.

The genera of neotropical Sepsidae can be differentiated by the following:

KEY TO GENERA OF NEOTROPICAL SEPSIDAE

- One pair of orbital setae present. Scutum with three pairs (1+2) of dorsocentral setae *Meropliosepsis* Duda
— Orbital setae absent. Scutum with only two pairs (0+2) of dorsocentral setae 2
- Postalar setae absent. Anal vein very short, ending far before the wing margin. Surstyli always asymmetrical *Microsepsis* Silva
— One pair of postalar setae present. Anal vein long, almost reaching wing margin. Surstyli symmetrical or asymmetrical 3
- Metepimeral bridge present 4
— Metepimeral bridge absent 6
- Fore coxa black *Pseudopalaosepsis* Ozerov
— Fore coxa yellow 5
- Male abdominal sternite 4 simple; anal lobe of wing well-developed; alula entirely covered with microtrichia, width of alula approximately 2 times as long as wide cell *bm*; basal-costal cell clear *Lateosepsis* gen.n.
— Male abdominal sternite 4 at sides with tuft of setae; anal lobe of wing narrow; alula without microtrichia, width of alula approximately equal to width of cell *bm*; basal-costal cell blackish *Palaosepsis* Duda
- Alula narrow, without microtrichia; male abdominal sternite 4 at sides with tuft of setae .. *Palaosepsisoides* Ozerov
— Alula broad, entirely covered with microtrichia; male abdominal sternite 4 simple *Archisepsis* Silva

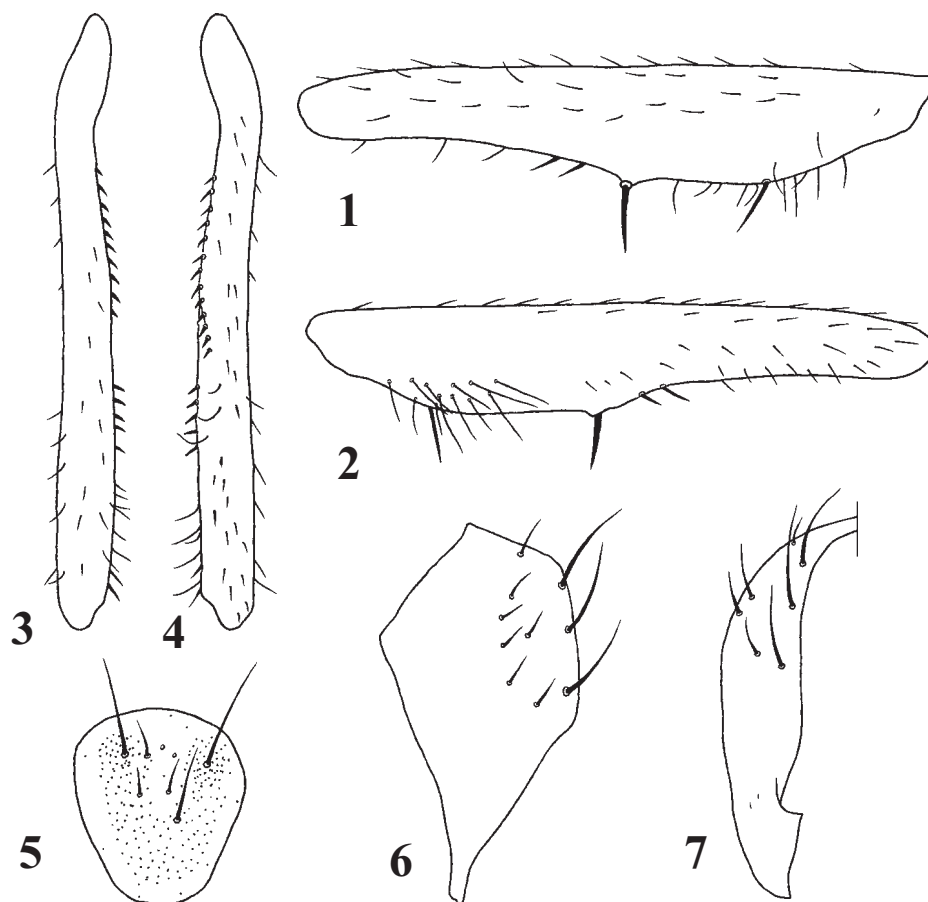


Fig. 10. *Archisepsis bolivica* sp.n., holotype ♂: 1 — fore femur (left), posterior view; 2 — fore femur (left), anterior view; 3 — fore tibia (left), posterior view; 4 — fore tibia (left), anterior view; 5 — abdominal sternite 4; 6 — epandrium and surstylus (left), lateral view; 7 — epandrium and surstylus (left), dorsal view.

Рис. 10. *Archisepsis bolivica* sp.n., голотип ♂: 1 — бедро передней левой ноги, сзади; 2 — бедро передней левой ноги, спереди; 3 — голень передней левой ноги, сзади; 4 — голень передней левой ноги, спереди; 5 — стернит IV брюшка; 6 — эпандрий и сурстиль (левый), сбоку; 7 — эпандрий и сурстиль (левый), сверху.

Archisepsis bolivica Ozerov, sp.n.

Fig. 10: 1–7.

TYPE-MATERIAL. Holotype ♀ "BOL[= BOLIVIA] La Paz, Caranavi, ca. 10 km NW, road to ENTEL tower, 1400 m, 15°46'35 S, 67°35'48 W, dung baits, 13 April 2001, S.A. Marshall, debu00167121" (MNHNB).

DESCRIPTION. Length of body 2.8 mm. Length of wing 2.7 mm.

Male. *Colour*. Frons black. Facial carina and gena yellow. Antennal grooves black. Postgena, clypeus and postcranium black. Scape and pedicel blackish, tinged with reddish yellow; postpedicel blackish-yellow. Thorax black. Legs yellow, only femur of hindleg at middle and tibia of hindleg in basal third blackish; tarsomeres 4 and 5 of all legs black. Wing clear, with dark spot near apex R_{2+3} ; basal-costal cell clear; veins brown. Upper calypter, its margin and lower calypter white, margin of lower calypter blackish. Halter white. Abdomen black.

Pollinosity. Frons shining. Face thinly greyish pruinose. Gena shining in upper half and greyish pruinose in lower half. Postcranium greyish pruinose. Scutum greyish pruinose, including postpronotal lobe. Proepisternum greyish pruinose. Proepimeron shining in upper part and white pruinose in lower part. Katepisternum shining, with stripe of white pollen along upper margin. Anepisternum shining, with big triangular spot

of greyish pollen in upper posterior corner. Anepimeron greyish pruinose, only along anterior margin shining; anepimeral process shining, but anepimeral ampulla greyish pruinose. Meron, katepimeron, metepisternum, metepimeron, katatergite and anatergite greyish pruinose. Mediotergite greyish pruinose, but with shining spot near abdomen. Scutellum and subscutellum greyish pruinose. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/12 times as long as vertical diameter of eye. Postpedicel in profile oval, approximately 1.5 times as long as wide. *loc*, *lpc*, *lvt*, *lvt*; *ora* absent. Occipital sclerite bare. Gena along lower margin with a row of hairs. Postgena without striking setae. 1 vibrissa.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal* (thin and short), 0+2 *dc*. Anepisternum in posterior half bearing scattered hairs and with a long seta near posterior margin. Scutellum with well-developed apical setae, basal setae thin, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg long and simple, with 1 apical *d*. Fore femur and tibia as in Fig. 10: 1–4. Coxa of midleg bare in upper half. Femur of midleg with a row of short *thina*. Tibia of midleg with 1 *av* in apical half and with apical *av* and *pv*. Femur and tibia of hindleg without striking setae. Tibia of hindleg without osmeterium-like area anterodorsally.

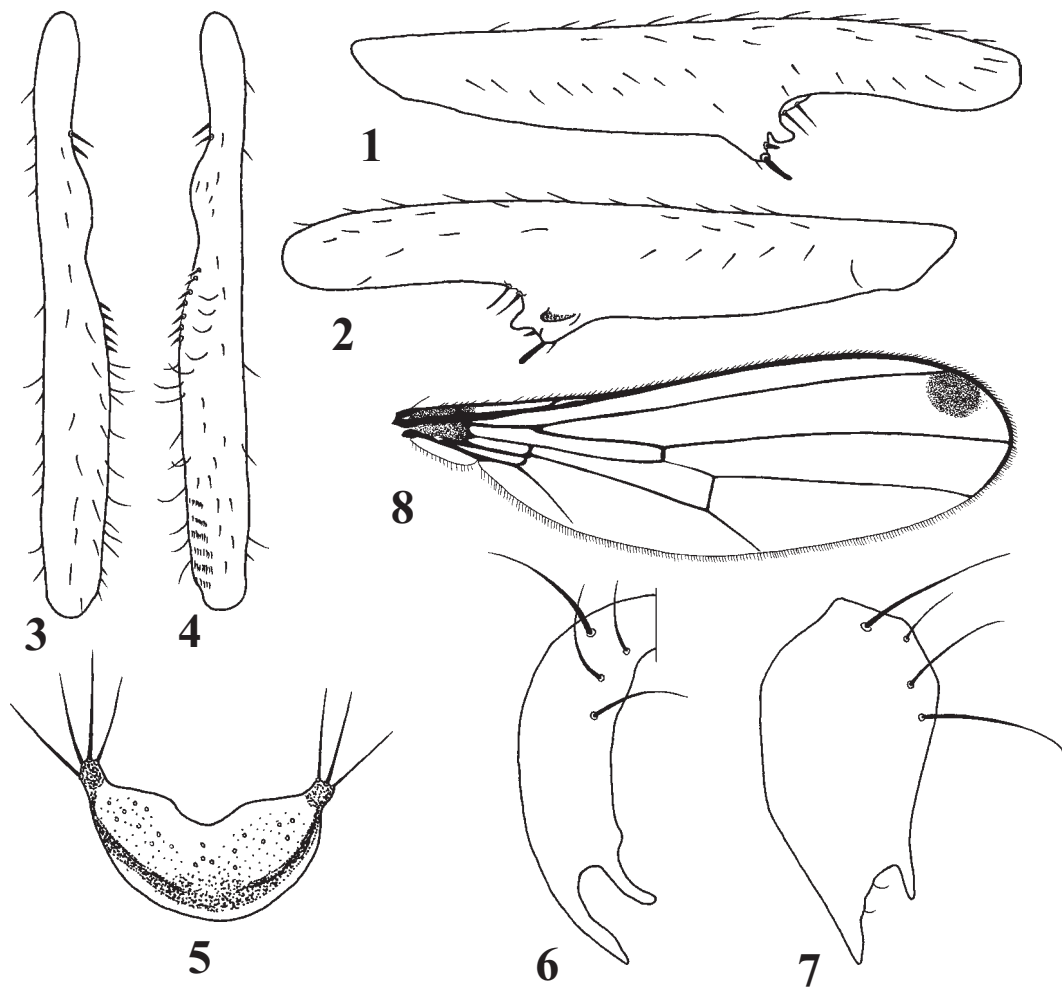


Fig. 11. *Palaeosepsioides marshalli* sp.n., holotype ♂: 1 — fore femur (left), anterior view; 2 — fore femur (left), posterior view; 3 — fore tibia (left), posterior view; 4 — fore tibia (left), anterior view; 5 — abdominal sternite 4; 6 — epandrium and surstylus (left), dorsal view; 7 — epandrium and surstylus (left), lateral view; 8 — wing.

Рис. 11. *Palaeosepsioides marshalli* sp.n., голотип ♂: 1 — бедро передней левой ноги, спереди; 2 — бедро передней левой ноги, сзади; 3 — голень передней левой ноги, сзади; 4 — голень передней левой ноги, спереди; 5 — стернит IV брюшка; 6 — эпандрий и сурстиль (левый), сверху; 7 — эпандрий и сурстиль (левый), сбоку; 8 — крыло.

Wing normal, longer than abdomen, with relatively well-developed anal lobe. Cells *sbm* and *br* separate. Anal vein almost reaching wing margin. Alula entirely covered with microtrichia; width of alula approximately 1.5 times as long as wide cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen visibly constricted after syntergite 1+2, the latter at sides with several thin setae. Tergites 4 and 5 with hair-like marginal setae. Sternite 4 as in Fig. 10: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 10: 6, 7.

Female. Unknown.

DIAGNOSIS. Easily differentiated from other species of *Archiseopsis* by the presence of many dark and light hairs on anterior surface basally of male femur of foreleg.

Palaeosepsioides marshalli Ozerov, sp.n.

Fig. 11: 1–7.

TYPE-MATERIAL. Holotype ♂ "BOLIVIA: La Paz, Coroico, Cerro Uchumachi, 2550 m, 16°12'43 S, 67°42'49 W, cloud forest,

pan traps, 5–16 April] 2001, S.A. Marshall, debu00167519" (MNHNB).

DESCRIPTION. Length of body 3.6 mm. Length of wing 3.5 mm.

Male. Colour. Frons and face black. Gena yellow. Postgena, clypeus and postcranium black. Antenna black. Thorax black. Legs yellow, only femora of midleg and hindleg in apical half with blackish ring and tibiae of midleg and hindleg in basal third or quarter blackish; tarsomeres 4 and 5 of all legs black, tarsomeres 1–3 of midleg and hindleg dorsally blackish. Wing clear, with dark spot below tip of vein R_{2+3} (Fig. 11: 8); basal-costal cell blackish; veins brown. Calypters and their margins white. Halter white. Abdomen black.

Pollinosity. Frons and gena shining. Face thinly greyish pruinose, but antennal grooves partly shining. Postcranium shining, but median occipital sclerite in lower part greyish pruinose. Scutum shining, with spot greyish pollen behind posterior pair of *dc* between setae; notopleuron extensively whitish pruinose; postpronotal lobe shining. Proepisternum and proepimeron shining. Katepisternum shining, with spot white pollen in upper posterior corner. Anepisternum, anepimeron, metepisternum

and metepimeron shining. Katepimeron greyish pruinose. Meron mostly shining, greyish pruinose along anterior and lower margins. Katatergite shining, but greyish pruinose on the border with anepimeron and near lower margin. Anatergite and mediotergite shining. Scutellum greyish pruinose, subscutellum shining. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/13 times as long as vertical diameter of eye. Postpedicel in profile oval, approximately 1.5 times as long as wide. *1oc*, *1poc*, *1ivt*, *1ovt*; *or* very short, hair-like. Occipital sclerite bare. Gena along lower margin with a row of short hairs. Postgena without striking setae. 2 vibrissae.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Anepisternum in posterior half bearing scattered hairs and with a long seta near posterior margin. Scutellum with well-developed apical setae, basal setae thin, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg long and simple, with 1 apical *d*. Fore femur and tibia as in Fig. 11: 1–4. Coxa of midleg bare in upper half. Femur of midleg with a row of short thina. Tibia of midleg with 1 *av* in apical half and with apical *av* and *pv*. Femur of hindleg without striking setae. Tibia of hindleg without striking setae, without osmeterium or osmeterium-like area anterodorsally.

Wing normal, longer than abdomen, with narrow anal lobe. Cells *bm* and *br* separate. Anal vein almost reaching wing margin. Alula entirely covered with microtrichia; width of alula approximately equal to width of cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen visibly constricted after syntergite 1+2. Tergites 4 and 5 without setae. Sternite 4 as in Fig. 11: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 11: 6, 7.

Female. Unknown.

DIAGNOSIS. Easily distinguished from *Palaeosepsioides erythromyrmus* (Silva, 1991) by the presence of spot on wing.

ETYMOLOGY. The name is based on the collector, Dr. Steve A. Marshall, who caught the specimen of this species.

Palaeosepsioides neotropicanus Ozerov, **sp.n.**

Fig. 12: 1–7.

TYPE-MATERIAL. Holotype ♂ “PANAMA: Chiri, 1760 m[,] 2 km E Cerro Punta[,] Baldwin Forest[,] 30.V.–8.VI.1977[,] S. Peck, dung traps” (UGG). Paratypes: 1 ♂, with same label as holotype (UGG); 1 ♂, COSTA RICA: San José, Zurqui de Moravia, 1600 m, VII.1991, P. Hanson (ZMUM).

DESCRIPTION. Length of body 3.2–3.6 mm. Length of wing 2.9–3.3 mm.

Male. Colour. Frons black or brownish. Facial carina and gena yellow. Antennal grooves blackish. Postgena, clypeus and postcranium black. Scape and pedicel blackish, tinged with yellowish; postpedicel yellow, with blackish anterior margin, to almost completely blackish. Thorax black. Legs yellow, only femora of midleg and hindleg in apical half with blackish ring and tibiae of midleg and hindleg in basal third or quarter blackish; tarsomeres 4 and 5 of all legs black. Wing clear, with dark spot near apex R_{2+3} ; basal-costal cell blackish; veins brown. Calypters and their margins white. Halter white. Abdomen black.

Pollinosity. Frons and gena shining. Face thinly greyish pruinose. Central part of postcranium thinly greyish pruinose, the rest surface shining. Scutum greyish pruinose, with shining spot anteriorly between postpronotal lobe and with shining spot above notopleuron; notopleuron extensively whitish pruinose; postpronotal lobe shining. Proepisternum and

proepimeron shining. Katepisternum shining, with spot of white pollen in upper posterior corner. Anepisternum, anepimeron, katepimeron and metepimeron shining. Meron and metepisternum greyish pruinose. Katatergite shining, but greyish pruinose on the border with anepimeron and near lower margin. Anatergite shining, only greyish pruinose near lower margin. Mediotergite shining. Scutellum greyish pruinose, subscutellum shining. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/10 times as long as vertical diameter of eye. Postpedicel in profile oval, approximately 1.5 times as long as wide. *1oc*, *1poc*, *1ivt*, *1ovt*; *or* very short, hair-like. Occipital sclerite bare. Gena along lower margin with a row of short hairs. Postgena without striking setae. 2 vibrissae.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Anepisternum in posterior half bearing scattered hairs and with a long seta near posterior margin. Scutellum with well-developed apical setae, basal setae thin, hair-like. Metepimeral bridge absent.

Legs. Coxa of foreleg long and simple, with 1 apical *d*. Fore femur and tibia as in Fig. 12: 1–4. Coxa of midleg bare in upper half. Femur of midleg with a row of short thina. Tibia of midleg with 1 *av* in apical half and with apical *av* and *pv*. Femur and tibia of hindleg without striking setae. Tibia of hindleg without osmeterium-like area anterodorsally.

Wing normal, longer than abdomen, with narrow anal lobe. Cells *bm* and *br* separate. Anal vein almost reaching wing margin. Alula entirely covered with microtrichia, its width approximately equal to width of cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen visibly constricted after syntergite 1+2. Tergites 4 and 5 without setae. Sternite 4 as in Fig. 12: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 12: 6, 7.

Female. Unknown.

DIAGNOSIS. It has spot on wing like the previous species, but easily differentiated from *P. marshalli* sp.n. by the grey pollen on face and scutum (see above).

Palaeosepsis bucki Ozerov, **sp.n.**

Fig. 13: 1–7.

TYPE-MATERIAL. Holotype ♂, “VENEZUELA: Aragua[,] 1550 m, 15 km N Maracay[,] 7.III.1995, S. Marshall” (UGG); Paratypes: 1 ♂, BOLIVIA: La Paz, Chulumani, Apa Apa Reserve, 2000 m, 16°21'15 S, 67°30'21 W, 1 April 2001, S.A. Marshall, debu00167471 (ZMUM); 1 ♀, ECUADOR: Napo Province, 7 km S, Baeza, 2000 m, 25-II-1979, H. & A. Howden, dung cup trap (UGG); 1 ♂, with same label as holotype (ZMUM); 1 ♂, VENEZUELA: Aragua, Henry Pitier N.P. Rancho Grande, 9.VIII.1994, L. Masner, 94-05, La Toma S.S. PM. (UGG).

DESCRIPTION. Length of body 3.1–4.2 mm. Length of wing 2.3–3.7 mm.

Male. Colour. Frons black, in apical third usually brownish. Facial carina and gena yellow. Antennal grooves blackish. Postgena, clypeus and postcranium black. Scape and pedicel blackish, tinged with yellowish; postpedicel yellow, usually blackish only along upper margin. Thorax black. Legs yellow, only femora of midleg and hindleg posterodorsally at middle and tibiae of midleg and hindleg in basal third blackish; tarsomeres 4 and 5 of all legs black. Wing with light greyish tinge, with dark spot at tip of vein R_{2+3} (Fig. 13: 1); basal-costal cell blackish; veins brown. Calypters and their margins white or blackish. Halter white. Abdomen black.

Pollinosity. Frons shining. Face thinly greyish pruinose. Gena subshining. Postcranium thinly greyish pruinose, but around *pvt* and *ivt*, and along orbita of eye shining. Scutum

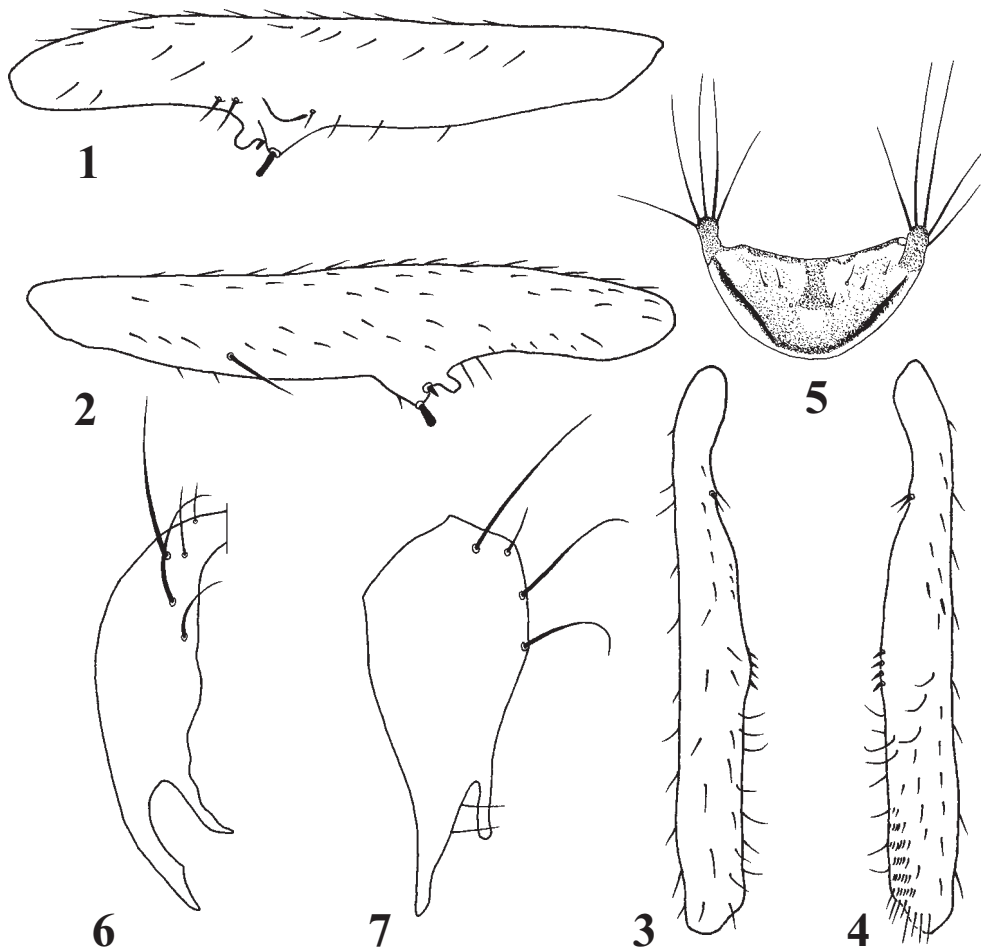


Fig. 12. *Palaeosepsioides neotropicanus* sp.n., ♂: 1 — fore femur (left), posterior view; 2 — fore femur (left), anterior view; 3 — fore tibia (left), posterior view; 4 — fore tibia (left), anterior view; 5 — abdominal sternite 4; 6 — epandrium and surstylus (left), lateral view; 7 — epandrium and surstylus (left), dorsal view.

Рис. 12. *Palaeosepsioides neotropicanus* sp.n., ♂: 1 — бедро передней левой ноги, сзади; 2 — бедро передней левой ноги, спереди; 3 — голень передней левой ноги, сзади; 4 — голень передней левой ноги, спереди; 5 — стернит IV брюшка; 6 — эпандрий и сурстиль (левый), сверху; 7 — эпандрий и сурстиль (левый), сбоку.

greyish pruinose, with shining spots above notopleuron and above wing base; postpronotal lobe shining; notopleuron extensively whitish pruinose. Proepisternum shining, only along lower margin whitish pruinose. Proepimeron extensively white pruinose. Katepisternum shining, with stripe of white pollen along upper margin. Anepisternum, anepimeron, katepimeron, meron, metepisternum, metepimeron, katatergite, anatergite and mediotergite shining. Scutellum greyish pruinose, subscutellum shining. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/18 times as long as vertical diameter of eye. Postpedicel in profile oval, approximately 1.5 times as long as wide. 1 *oc*, 1 *poc*, 1 *ivt*, 1 *ovt*; *or* very short, hair-like. Occipital sclerite bare. Gena along lower margin with a row of short hairs. Postgena without striking setae. 2 vibrissae.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Anepisternum in posterior half bearing scattered hairs and with a long seta near posterior margin. Scutellum with well-developed apical setae, basal setae thin, hair-like. Metepimeral bridge present, broad.

Legs. Coxa of foreleg long and simple, with 1 apical *d*. Fore femur and tibia as in Fig. 13: 2–5. Coxa of midleg bare in upper half. Femur of midleg with a row of short *thina*. Tibia of midleg with strong *v* in apical half and with apical *av* and *pv*. Femur of hindleg without striking setae. Tibia of hindleg without striking setae, with osmeterium-like area anterodorsally.

Wing longer than abdomen, with narrow anal lobe. Cells *bm* and *br* separate. Anal vein long, almost reaching wing margin. Alula entirely covered with microtrichia; width of alula approximately equal to width of cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen slightly constricted after sytergite 1+2. Tergites 4 and 5 with several hair-like marginal setae. Sternite 4 as in Fig. 13: 6. Surstyli asymmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 13: 7.

Female. Resembles male. Tarsomere 2 of foreleg black.

DIAGNOSIS. Differs from close *Palaeosepsis maculata* (Duda, 1926) by the following characters: wing with small spot at tip of vein R_{2+3} ; scutum usually shining only behind postpronotal lobe and from the outside of *dc* behind *spal*;

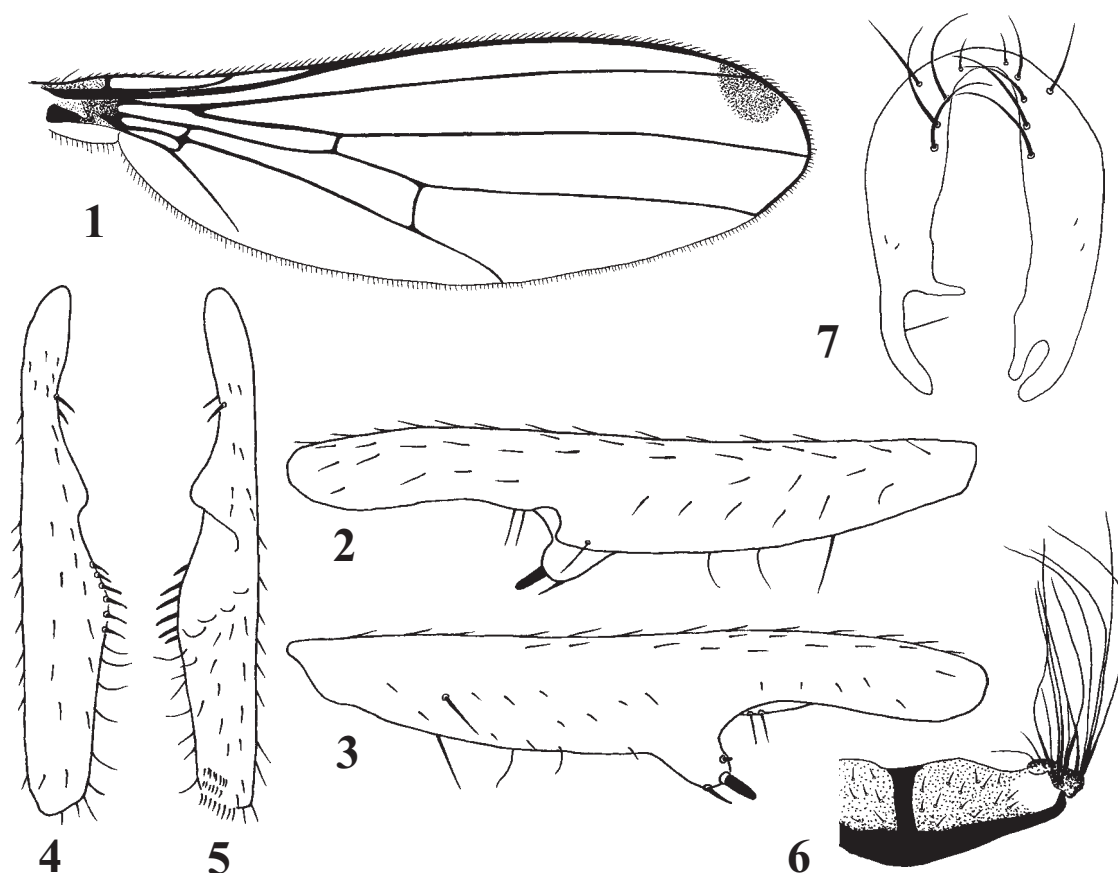


Fig. 13. *Palaeosepsis bucki* sp.n., ♂: 1 — wing; 2 — fore femur (left), posterior view; 3 — fore femur (left), anterior view; 4 — fore tibia (left), posterior view; 5 — fore tibia (left), anterior view; 6 — abdominal sternite 4; 7 — epandrium and surstyli, dorsal view.

Рис. 13. *Palaeosepsis bucki* sp.n., ♂: 1 — крыло самца; 2 — бедро передней левой ноги, сзади; 3 — бедро передней левой ноги, спереди; 4 — голень передней левой ноги, сзади; 5 — голень передней левой ноги, спереди; 6 — стернит IV брюшка; 7 — эпандрий и сурстии, сверху.

surface behind transverse suture to *spal* greyish pruinose. Wing of *P. maculata* with big spot near apex R_{2+3} (Fig. 14), scutum with longitudinal stripe of greyish pollen between *dc*, the rest of surface is shining.

ETYMOLOGY. This species is named for Dr. Matthias Buck, who sent me for study the material of neotropical Sepsidae from University of Guelph and who collected the part of this material.

Palaeosepsis eberhardi Ozerov, sp.n.

Fig. 14: 1–9.

TYPE-MATERIAL. Holotype ♂, “CR[≠ COSTA RICA] Puntarenas, Monteverde Biol. Res., 1500 m, cloud forest, pans along stream, 13–14 Jun[e] 2000, M. Buck, debu00133962” (INBC). Paratypes: 1 ♂, 1 ♀, with same label as holotype, debu00133959 and debu00133932 (UGG); 1 ♀, COSTA RICA: Puntarenas, Monteverde Biol. Res., 1500 m, cloud forest, pans along stream, 12–13 June 2000, M. Buck, debu00134134 (UGG); 1 ♀, COSTA RICA: Puntarenas, Monteverde Biol. Res., 1500 m, tree fall sweep & pans, 14 June 2000, M. Buck, debu00124885 (UGG); 2 ♀♀, COSTA RICA: Cantago, Tapanti Natl. Pk., above Ranger Sta., ca. 1250 m, 11–12 October 1999, S.A. Marshall, debu00167501 and debu00167502 (UGG); 3 ♀♀, COSTA RICA: Monteverde Cl. For., 1500 m, dung traps and pans, 19–25.VIII.1993, E.R.

Barr (UGG); 3♂♂, 2♀♀, COSTA RICA: SAN JOSÉ, San Antonio de Escazu, 1325 m, IV. 2000, W. Eberhard (ZMUM); 1 ♀, HONDURAS: F. Morazan, 30 km E Tegucigalpa, Cerro Uyuca, 1800 m, 4–10.VI.1994, b. Gill (UGG); 1 ♀, PANAMA: Chiri., 1760 m, 2 km E Cerro Punta, Baldwin Forest, 30.V.–8.VI.1977, S. Peck, dung traps (UGG).

DESCRIPTION. Length of body 4.0–5.6 mm. Length of wing 3.5–4.3 mm.

Male. *Colour*. Frons brown, in apical quarter sometimes yellowish. Facial carina and gena yellow or reddish yellow. Antennal grooves black. Postgena, clypeus and postcranium black. Scape and pedicel black, tinged with reddish; postpedicel reddish yellow, often blackish along anterior margin. Thorax black. Legs mostly yellow, but femur of foreleg sometimes blackish on apical surface, femora of midleg and hindleg in centre with broad black ring (sometimes almost completely black), tibia of midleg in basal third or half black, tibia of hindleg in basal third or half or on all anterior surface and on all posterior surface black; tarsomeres 4 and 5 of all legs black. Wing clear, near apex with very big black spot, divided by vein of R_{4+5} (Fig. 14: 8); basal-costal cell completely and costal cell in basal half black; veins black. Calypters and their margins white to blackish. Halter white. Abdomen black.

Pollinosity. Frons and gena shining. Face thinly greyish pruinose. Postcranium greyish pruinose, but along orbita of

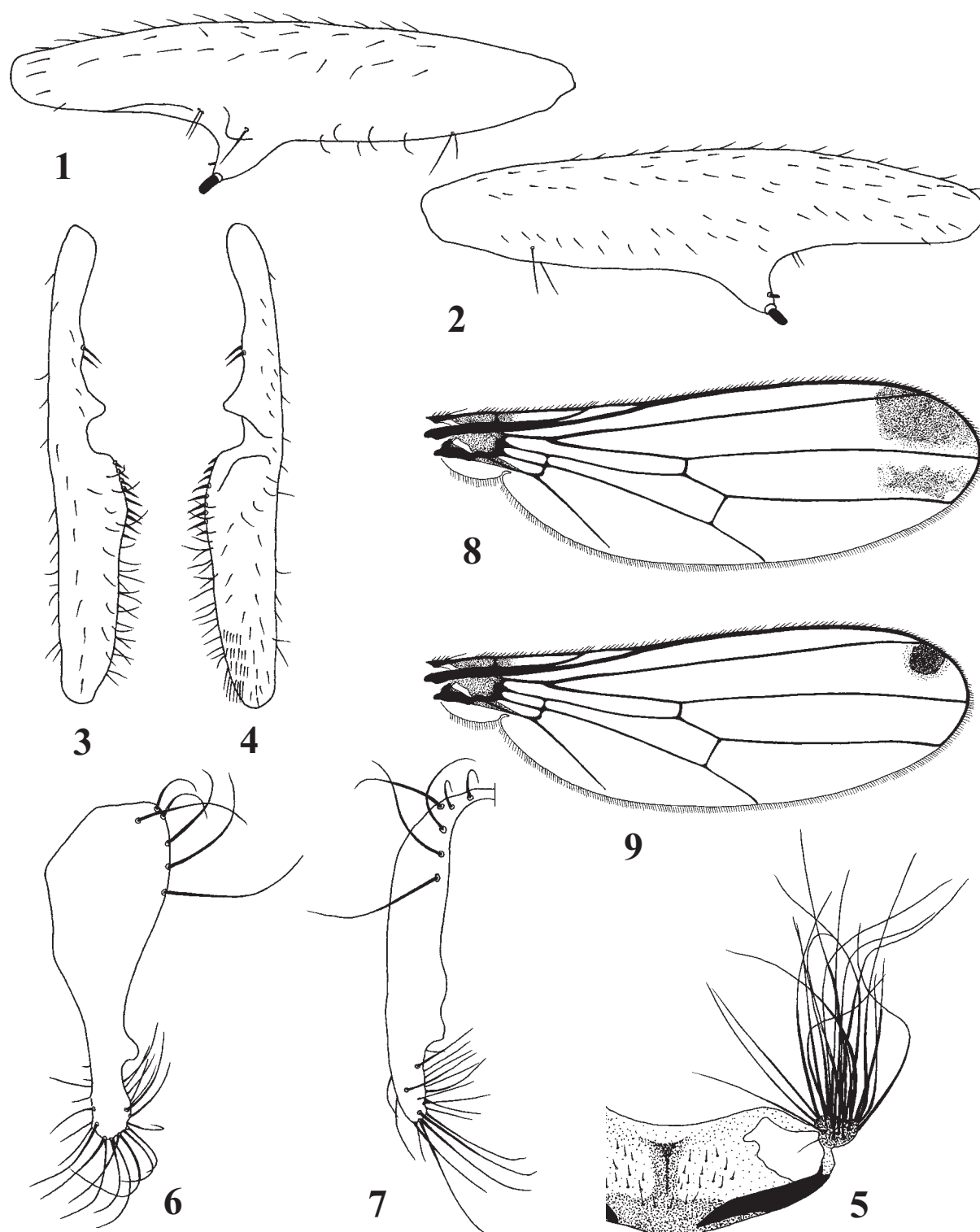


Fig. 14. *Palaeosepsis eberhardi* sp.n.: 1 — male fore femur (left), posterior view; 2 — male fore femur (left), anterior view; 3 — male fore tibia (left), posterior view; 4 — male fore tibia (left), anterior view; 5 — male abdominal sternite 4; 6 — epandrium and surstylus (left), lateral view; 7 — epandrium and surstylus (left), dorsal view; 8 — male wing; 9 — female wing.

Рис. 14. *Palaeosepsis eberhardi* sp.n.: 1 — бедро передней левой ноги самца, сзади; 2 — бедро передней левой ноги самца, спереди; 3 — голень передней левой ноги самца, сзади; 4 — голень передней левой ноги самца, спереди; 5 — стернит IV брюшка самца; 6 — эпандрий и сурстий (левый), сверху; 7 — эпандрий и сурстий (левый), сбоку; 8 — крыло самца; 9 — крыло самки.

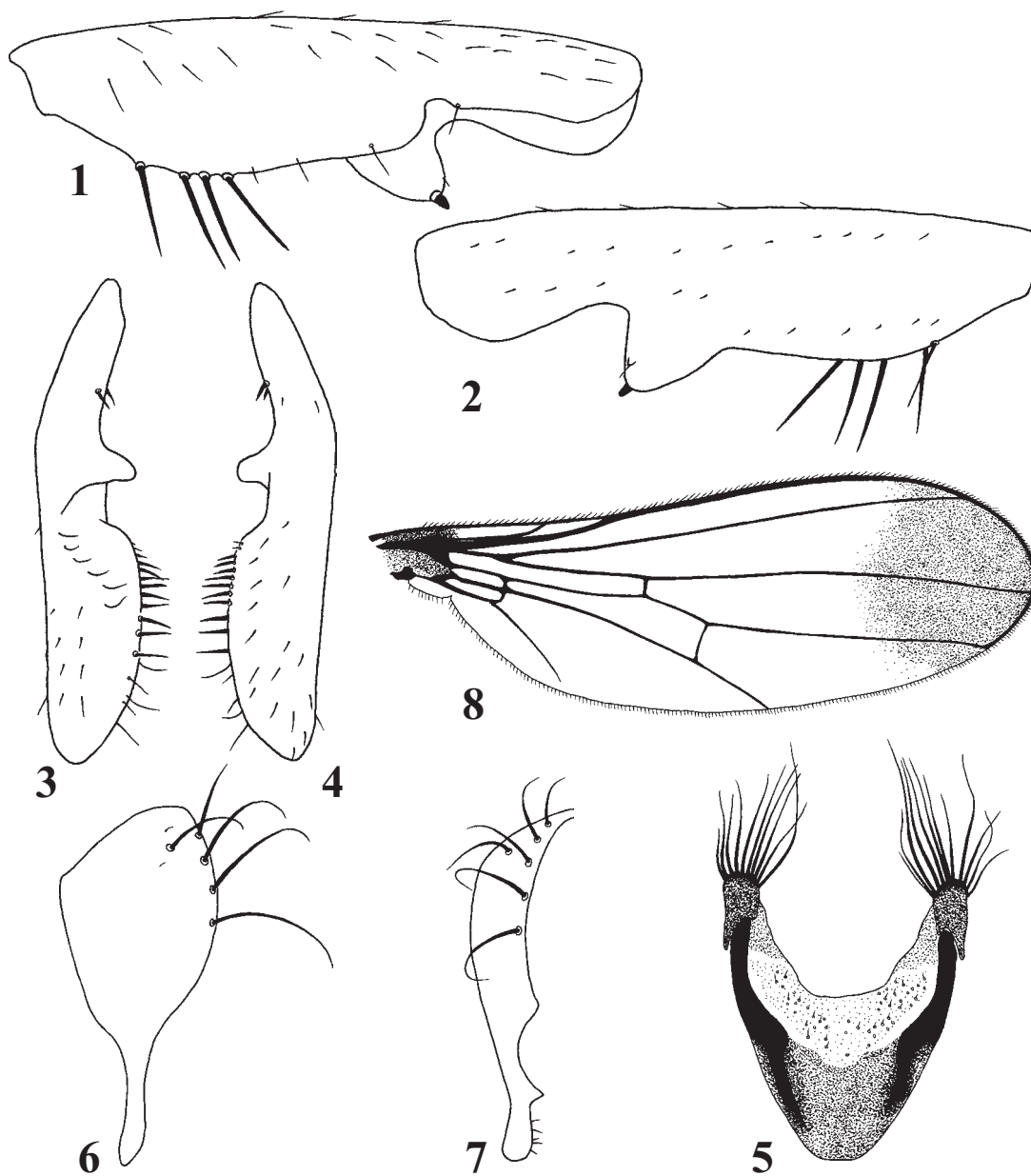


Fig. 15. *Palaeosepsis golovastik* sp.n., holotype ♂: 1 — fore femur (right), posterior view; 2 — fore femur (right), anterior view; 3 — fore tibia (right), anterior view; 4 — fore tibia (right), posterior view; 5 — abdominal sternite 4; 6 — epandrium and surstylus (left), lateral view; 7 — epandrium and surstylus (left), dorsal view.

Рис. 15. *Palaeosepsis golovastik* sp.n., голотип ♂: 1 — бедро передней правой ноги, сзади; 2 — бедро передней правой ноги, спереди; 3 — голень передней правой ноги, спереди; 4 — голень передней правой ноги, сзади; 5 — стернит IV брюшка; 6 — эпандрий и сурстиль (левый), сбоку; 7 — эпандрий и сурстиль (левый), сверху.

eye shining. Scutum subshining, with spot greyish pollen behind posterior pair of *dc* between setae; spot of greyish pollen near postpronotal lobe also present; notopleuron extensively whitish pruinose. Proepisternum and proepimeron shining, but along lower margin extensively white pruinose. Katepisternum shining, with stripe of white pollen along upper margin. Anepisternum, anepimeron, katepimeron, meron, metepisternum, metepimeron, katatergite, anatergite and mediotergite shining, but usually stripe of greyish pollen present on the border between katatergite and mediotergite. Scutellum

greyish pruinose, subscutellum shining. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/18 times as long as vertical diameter of eye. Postpedicel in profile oval, approximately 1.5 times as long as wide. 1 *oc*, 1 *poc*, 1 *ivi*, 1 *ovt*; *or* very short, hair-like. Occipital sclerite bare. Gena along lower margin with a row of short hairs. Postgena without striking setae. 2–3 vibrissae.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Anepisternum in posterior half bearing scattered hairs and with a long seta near posterior

margin. Scutellum with well-developed apical setae, basal setae thin, hair-like. Metepimeral bridge present, broad.

Legs. Coxa of foreleg long and simple, with 1 apical *d* and with a row of thin setulae near apex on anterior surface. Fore femur and tibia as in Fig. 14: 1–4. Coxa of midleg bare in upper half. Femur of midleg with a row of short thin *a*. Tibia of midleg with 1 *v* in apical half and with apical *av* and *pv*. Femur of hindleg with 1 long thin *v* basally. Tibia of hindleg without striking setae, with osmeterium-like area anterodorsally.

Wing longer than abdomen, with narrow anal lobe. Cells *bm* and *br* separate. Anal vein almost reaching wing margin. Alula entirely covered with microtrichia; width of alula slightly more than width of cell *bm*. Margin of upper calypter with long hairs, margin of lower calypter without hairs.

Abdomen visibly constricted after syntergite 1+2. Tergites 4 and 5 with marginal hair-like setae. Sternite 4 as in Fig. 14: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 14: 6, 7.

Female. Resembles male. Femur of foreleg simple, tibia of hindleg without osmeterium-like area. Wing with oval black spot below tip of vein R_{2+3} (Fig. 14: 9).

DIAGNOSIS. Differs from close *Palaeosepsis dentatiformis* (Duda, 1926) by the presence of distinct large spot on wing and structure of male genitalia.

ETYMOLOGY. This species is named after William G. Eberhard, who made large contribution to the study of behaviour of neotropical Sepsidae and collected the first specimen of this species known to me.

Palaeosepsis golovastik Ozerov, **sp.n.**

Fig. 15: 1–8.

TYPE-MATERIAL. Holotype ♂, "ECUADOR: Prt. Orllna: Rio Tiputini (0°38.2'S, 76°8.9'W) 12–26 Aug[ust] 1999, W.N. Mathis, A. Baptista, M. Kotrba" (NMNH).
DESCRIPTION. Length of body 3.9 mm. Length of wing 3.0 mm.

Male. Colour. Frons brown, in apical third yellow. Face and gena yellow. Postgena, clypeus and posteranium black. Antenna yellow. Thorax black. Legs mostly yellow, but femora of midleg and hindleg in apical half with blackish ring, tibiae of midleg and hindleg in basal third blackish, tarsomeres 4 and 5 of all legs black. Wing clear, apical quarter of wing blackish (Fig. 15: 8); basal-costal cell blackish; veins brown. Calypters and their margins white to blackish. Halter white. Abdomen black.

Pollinosity. Frons shining. Face and gena subshining. Central part of posteranium thinly greyish pruinose, the rest surface shining. Scutum shining, with spot greyish pollen behind posterior pair of *dc* between setae; also present spot of greyish pollen near postpronotal lobe; notopleuron extensively whitish pruinose. Proepisternum and proepimeron shining, but along lower margin extensively white pruinose. Katepisternum shining, with stripe of white pollen along upper margin. Anepisternum, anepimeron, katepimeron, meron, metepisternum, metepimeron, katatergite, anatergite and mediotergite shining. Scutellum greyish pruinose, subscutellum shining. Abdomen shining.

Head flattened dorsoventrally, posteranium convex; head dorsally slightly longer than wide and wider than thorax. Eye in lateral view roundish. Height of gena below eye approximately 1/22 times as long as vertical diameter of eye. Postpedicel in profile oval, approximately 1.5 times as long as wide. 1 *oc*, 1 *poc*, 1 *ivt*, 1 *ovt*; *or* very short, hair-like. Occipital sclerite bare. Gena along lower margin with a row of short hairs. Postgena without striking setae. 2 thin vibrissae.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Anepisternum in posterior half bearing scattered hairs and with a long seta near posterior margin. Scutellum with well-developed apical setae, basal setae thin, hair-like. Metepimeral bridge present.

Legs. Coxa of foreleg long and simple, with 1 apical *d*. Fore femur and tibia as in Fig. 15: 1–4. Coxa of midleg bare in upper half. Femur of midleg with a row of short thin *a*. Tibia of midleg with 1 *v* in apical half and with apical *av* and *pv*. Femur of hindleg with 1 long thin *v* basally. Tibia of hindleg without striking setae, with osmeterium-like area anterodorsally.

Wing normal, longer than abdomen, with narrow anal lobe. Cells *bm* and *br* separate. Anal vein long, almost reaching wing margin. Alula entirely covered with microtrichia, narrow, its width approximately equal to width of cell *bm*. Margin of upper calypter with long hairs, margin of lower calypter without hairs.

Abdomen visibly constricted after syntergite 1+2. Tergites 4 and 5 with marginal hair-like setae. Sternite 4 as in Fig. 15: 5. Surstyli symmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 15: 6, 7.

Female. Unknown.

DIAGNOSIS. Distinctly differs from other species of *Palaeosepsis* by long setae on femur of hindleg basally posteriorly. Head dorsally slightly longer than wide and is wider than thorax.

Palaeosepsis morula Ozerov, **sp.n.**

Fig. 16: 1–7.

TYPE-MATERIAL. Holotype ♂, "CR[= COSTA RICA] Puntarenas, Punia Leona, forest around hotel, 21–23 Feb[ruary] 2001[, P.D. Careless, debu00151129" (INBC). Paratypes: 1 ♀, HONDURAS: Cerro Monserrat, 7 km SW Yusearan, 24.V.1994, dungtp. H. & A. Howden (UGG).

DESCRIPTION. Length of body 3.9–4.6 mm. Length of wing 3.0–3.9 mm.

Male. Colour. Frons black, in apical third usually brownish. Facial carina and gena yellow. Antennal grooves blackish. Postgena, clypeus and posteranium black. Scape and pedicel blackish, tinged with yellowish; postpedicel yellow, usually blackish only along upper margin. Thorax black. Legs yellow, only femora of midleg and hindleg in apical half, except apex, and tibiae of midleg and hindleg in basal third blackish; tarsomeres 4 and 5 of all legs black. Wing with light greyish tinge, with brownish spot near apex R_{2+3} (Fig. 16: 7); basal-costal cell blackish; veins brown. Calypters and their margins white to blackish. Halter white. Abdomen black.

Pollinosity. Frons shining. Face thinly greyish pruinose. Gena subshining. Central part of occipital and median occipital sclerites greyish pruinose, the rest surface shining. Scutum shining, with spot of greyish pollen behind posterior pair of *dc* between setae; notopleuron extensively whitish pruinose. Proepisternum and proepimeron shining, only along lower margin extensively whitish pruinose. Katepisternum shining, with stripe of whitish pollen along upper margin. Anepisternum, anepimeron, katepimeron, meron, metepisternum, metepimeron, katatergite, anatergite and mediotergite shining. Scutellum greyish pruinose, subscutellum shining. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/18 times as long as vertical diameter of eye. Postpedicel in profile oval, approximately 1.5 times as long as wide. 1 *oc*, 1 *poc*, 1 *ivt*, 1 *ovt*; *or* very short, hair-like. Occipital sclerite bare. Gena along lower margin with a row of short hairs. Postgena without striking setae. 2 vibrissae.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+2 *dc*. Anepisternum in posterior half bearing scattered hairs and with a long seta near posterior

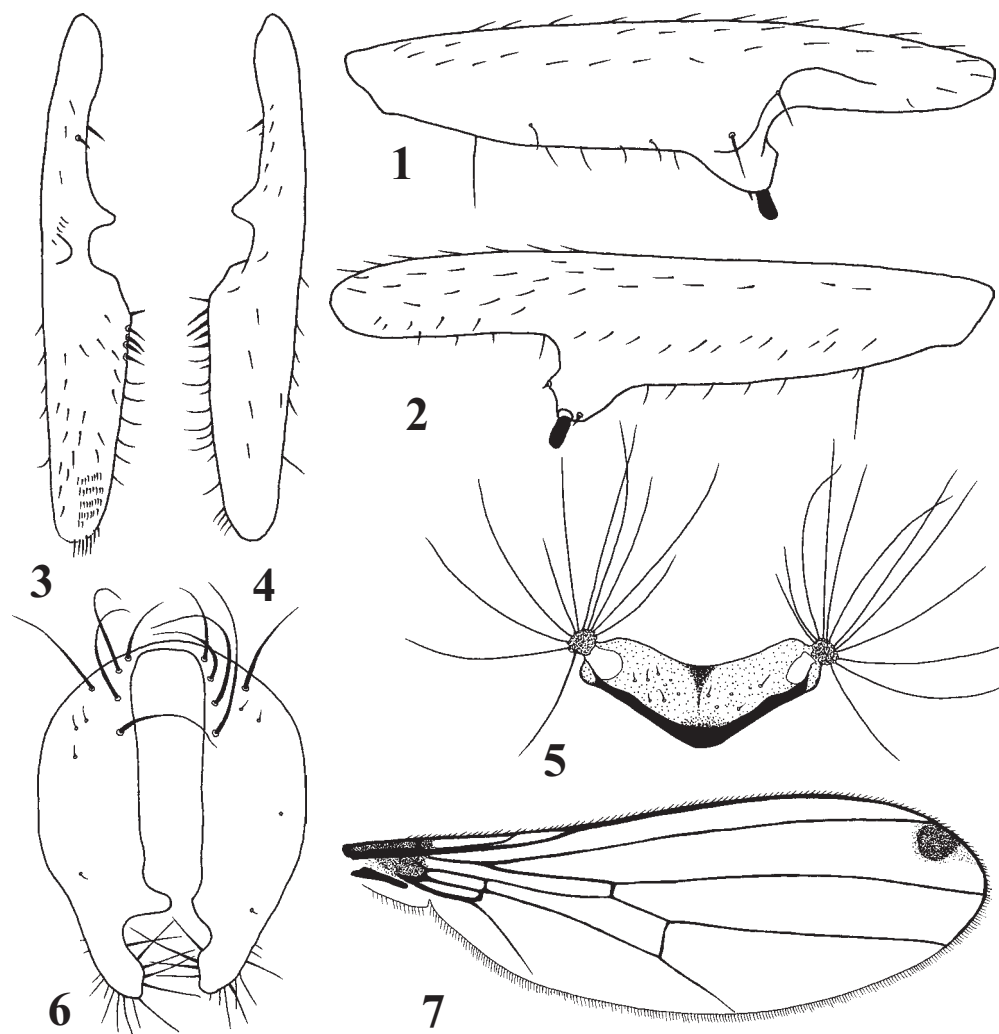


Fig. 16. *Palaeosepsis morula* sp.n., holotype ♂: 1 — fore femur (right), posterior view; 2 — fore femur (right), anterior view; 3 — fore tibia (right), anterior view; 4 — fore tibia (right), posterior view; 5 — abdominal sternite 4; 6 — epandrium and surstyli, dorsal view; 7 — wing.

Рис. 16. *Palaeosepsis morula* sp.n., голотип ♂: 1 — бедро передней правой ноги, сзади; 2 — бедро передней правой ноги, спереди; 3 — голень передней правой ноги, спереди; 4 — голень передней правой ноги, сзади; 5 — стернит IV брюшка; 6 — эпандрий и сурстии, сверху; 7 — крыло.

margin. Scutellum with well-developed apical setae, basal setae thin, hair-like. Metepimeral bridge present.

Legs. Coxa of foreleg long and simple, with 1 apical *d*. Fore femur and tibia as in Fig. 16: 1–4. Coxa of midleg bare in upper half. Femur of midleg with a row of short *thina*. Tibia of midleg with strong *v* in apical half and with apical *av* and *pv*. Femur and tibia of hindleg without striking setae. Tibia of hindleg with osmeterium-like area anterodorsally.

Wing longer than abdomen, with narrow anal lobe. Cells *sbm* and *br* separate. Anal vein long, almost reaching wing margin. Alula entirely covered with microtrichia; width of alula approximately equal to width of cell *bm*. Margin of upper calypter with hairs, margin of lower calypter without hairs.

Abdomen visibly constricted after syntergite 1+2. Tergites 4 and 5 with marginal hair-like setae. Sternite 4 as in Fig. 16: 5. Surstyli slightly asymmetrical, fused to epandrium. Epandrium and surstyli as in Fig. 16: 6.

Female. Resembles male. Femur of hindleg with black spot posteriorly. Femur of foreleg simple, tibia of hindleg without osmeterium-like area. Tarsomeres 4 and 5 of foreleg black.

DIAGNOSIS. From the close species *P. eberhardi* sp.n. differs by small spot near apex of wing, not differing in both sexes.

Palaeosepsis punctulata Ozerov, sp.n.

Fig. 17.

TYPE-MATERIAL. Holotype ♀ “BOLIVIA: La Paz: Nor Yungas, above Coroico, Cerro Uchumachi, summit, 1° forest, GPS 16°12'43 S, 67°42'49 W, 16 April 2001, A.L. Norrbom” (NMNH). Paratypes: 1 ♀, BOLIVIA: La Paz, Chulumani, Apa Apa Reserve, 2000 m, 16°21'15 S, 67°30'21 W, 1 April 2001, S.A. Marshall, debu00167503 (ZMUM); 1 ♀, ECUADOR: Napo Province, 7 km S, Baeza, 2000 m, 25-II-1979, H. & A. Howden, dung cup trap (UGG).

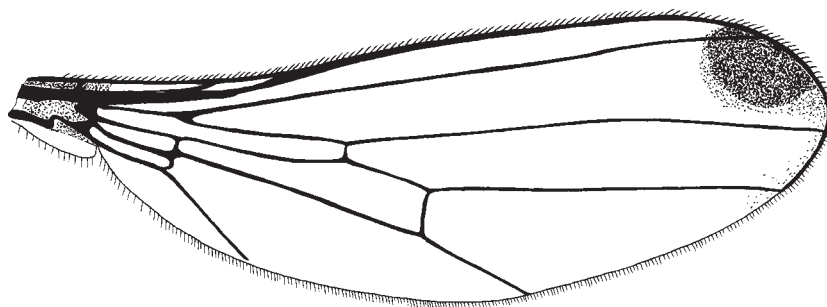


Fig. 17. *Palaeosepsis punctulata* sp.n., female wing.

Рис. 17. *Palaeosepsis punctulata* sp.n., крыло самки.

DESCRIPTION. Length of body 3.4–4.4 mm. Length of wing 4.4–5.2 mm.

Female. Colour. Frons brown to black. Facial carina and gena yellow to brown. Antennal grooves black. Postgena, clypeus black. Postcranium brown or black. Antenna blackish, tinged with reddish. Thorax black. Legs yellow, but femora of midleg and hindleg in apical third with blackish ring or spots, tibiae of midleg and hindleg in basal third blackish, tarsomeres 3–5 of foreleg and tarsomeres 4 and 5 of midleg and hindleg black. Wing clear, with big oval dark spot below apex of R_{2+3} (Fig. 17); basal-costal cell blackish; veins brown. Calypters and their margins whitish to blackish. Halter white or yellowish. Abdomen black.

Pollinosity. Frons shining. Face thinly greyish pruinose, but antennal grooves partly shining. Gena subshining. Postcranium shining, only median occipital sclerite greyish pruinose. Scutum shining, notopleuron whitish pruinose. Proepisternum shining. Proepimeron shining, but along lower margin greyish pruinose. Katepisternum shining, with stripe of white pollen along upper margin. Anepisternum, anepimeron, katepimeron, meron, metepisternum, metepimeron, katatergite, anatergite and mediotergite shining. Scutellum and subscutellum shining. Abdomen shining.

Head and eye in lateral view roundish. Height of gena below eye approximately 1/11 times as long as vertical diameter of eye. Postpedicel in profile oval, approximately 1.5 times as long as wide. 1 *oc*, 1 *poc*, 1 *ivt*, 1 *ovt*; *or* very short, hair-like. Occipital sclerite bare. Gena along lower margin with a row of short hairs. Postgena without striking setae. 1–2 thin vibrissae.

Thorax. Scutum with the following paired setae: 1 *pprn*, 2 *npl*, 1 *spal*, 1 *pal*, 0+1 *dc* (postsutural; prescutellar absent).

Anepisternum in posterior half bearing scattered hairs and with a long seta near posterior margin. Scutellum with well-developed apical setae, basal setae thin, hair-like. Metepimeral bridge present.

Legs. Coxa of foreleg long and simple, with 1 apical *d*. Femur of foreleg simple. Coxa of midleg bare in upper half. Femur of midleg with a row of short *thina*. Tibia of midleg with 1 *v* in apical half and with apical *av* and *p_v*. Femur and tibia of hindleg without striking setae.

Wing normal, longer than abdomen, with very narrow anal lobe. Cells *bm* and *br* separate. Anal vein long, almost reaching wing margin. Alula entirely covered with microtrichia, very narrow, its width less than width of cell *bm*. Margin of upper calypter with long hairs, margin of lower calypter without hairs.

Abdomen not constricted after syntergite 1+2. Tergites without setae.

Male. Unknown.

DIAGNOSIS. From the other species of *Palaeosepsis* is easily differentiated by the presence of only one pair of dorsocentral setae.

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