

A review of the sepsid flies of Palaeosepsini, trib.n. (Diptera Sepsidae).

Обзор мух-муравьевидок трибы Palaeosepsini, trib.n. (Diptera Sepsidae).

A. L. Ozerov

А. А. Озеров

Zoological Museum, Moscow Lomonosov State University, Herzen Street 6, Moscow 103009, Russia.

Зоологический музей, Московский государственный университет им. М.В. Ломоносова, ул. Герцена 6, Москва 103009, Россия.

KEY WORDS: Diptera, Sepsidae, Palaeosepsini, neotropical region, taxonomy, new tribe, new genera, new species.

КЛЮЧЕВЫЕ СЛОВА: Diptera, Sepsidae, Palaeosepsini, неотропическая область, таксономия, новая триба, новые роды, новые виды.

ABSTRACT: Palaeosepsini, the new tribe comprising the genera *Ajdasepsis* gen.n., *Meropliosepsis* Duda, *Palaeosepsioides* Ozerov, *Palaeosepsis* Duda (s.str.), *Phalacrosepsis* gen.n., and *Pseudopalaeosepsis* Ozerov, is reviewed. The important character distinguishing the members of the tribe from other representatives of the family Sepsidae is the absence of bristles, setulae or hairs on their occiput. The new genera *Ajdasepsis* and *Phalacrosepsis* are distinguished as a result of splitting the genus *Palaeosepsis* (s.l.) into three, with *A.fulva* sp.n. and *Ph.peruana* sp.n. described within the former two genera. Key to the genera and species of Palaeosepsini as well as distributional data are provided.

РЕЗЮМЕ: Дан обзор двукрылых новой трибы Palaeosepsini, у членов которой отсутствуют щетинки, щетиночки или волоски на затылочном склерите, что отличает их от всех других представителей семейства Sepsidae. Триба включает роды *Ajdasepsis* gen.n., *Meropliosepsis* Duda, *Palaeosepsioides* Ozerov, *Palaeosepsis* Duda (s.str.), *Phalacrosepsis* gen.n. и *Pseudopalaeosepsis* Ozerov. Новые роды *Ajdasepsis* и *Phalacrosepsis* выделены в результате деления рода *Palaeosepsis* (s.l.) на три самостоятельных рода. В этих родах описаны по одному новому виду: *A.fulva* sp.n. и *Ph.peruana* sp.n. В статье приведены определительные таблицы родов и видов, а также данные по распространению представителей трибы Palaeosepsini.

INTRODUCTION

Sepsidae is a small family of acalyptrate Diptera, containing about 30 genera and about 250 species distributed in all zoogeographic regions. No of generally accepted suprageneric classification of them exists.

I support the point of view of Steyskal [1992], who distinguishes two subfamilies within Sepsidae, Orygmatinae and Sepsinae. The subfamily Orygmatinae contains the only Holarctic genus and species, *Orygma luctuosum* Meigen. The subfamily Sepsinae Steyskal is divided into 3 tribes: Saltellini, Sepsini, and Toxopodini. I think the number of tribes should be increased. In particular, all or most of the neotropical Sepsidae ought to be united into a separate tribe, Palaeosepsini, trib.n.

The tribe Palaeosepsini includes the genera *Ajdasepsis* gen.n., *Palaeosepsis* Duda (s.str.), *Phalacrosepsis* gen.n., *Meropliosepsis* Duda, *Palaeosepsioides* Ozerov, and *Pseudopalaeosepsis* Ozerov. The latter three genera are monotypic. *Palaeosepsis* was originally described as a subgenus of *Sepsis* Fallen. Steyskal [1967] first elevated it to full generic status, and later [1968] incorporated in it most of the neotropical Sepsidae. The genera *Ajdasepsis* and *Phalacrosepsis* are distinguished as a result of splitting the genus *Palaeosepsis* (s.l.) into three genera.

Although this study was based primarily on specimens in the U.S. National Museum of Natural History and American Museum of Natural History, numerous others were borrowed, particularly type specimens of species described previously.

The following abbreviations are used for the museums and collection sites:

AMNH - American Museum of Natural History, New York, USA

BMNH - The Natural History Museum, London, England

CMNH - The Carnegie Museum of Natural History, Pittsburgh, USA

HECO - Hope Entomological Collections, Oxford, England

HNHM - Hungarian Natural History Museum, Budapest, Hungary

IZML - Instituto de Zoologia Miguel Lillo, Tucuman, Argentina

MNHN - Museum National d'Histoire Naturelle, Paris, France

MNHU - Museum fur Naturkunde an der Humboldt-Universitat, Berlin, Germany

NHMW - Naturhistorisches Museum, Wien, Austria

SMNH - Swedish Museum of Natural History, Stockholm, Sweden

USNM - United States National Museum, Washington, USA

ZMC - Zoological Museum, Copenhagen, Denmark

ZMUM - Zoological Museum, Moscow State University, Moscow, Russia

I have examined about 5000 specimens and the maximum number of the type specimens. The species described before 1991 are redescribed, and diagnostic descriptions are given for the others. The descriptive terminology follows that published in the Manual of Nearctic Diptera [McAlpine, 1981].

SYSTEMATICS

Palaeosepsini, trib. n.

Type genus: *Palaeosepsis* Duda, 1926.

DIAGNOSIS. Small to moderately large flies, similar to those of Sepsini but differing from them and other members of the family Sepsidae by the absence of bristles, setulae, or hairs on occiput. Other characters of Palaeosepsini are the following: arista bare; katapisternum shining or subshining, but with a silvery pruinose upper posterior corner or silvery pruinosity along dorsal margin; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; male hind tibia without an osmeterium; *bm-cu* crossvein present; abdomen without strong bristles; surstyli, as a rule, bicornute, symmetrical or asymmetrical.

Key to the genera of Palaeosepsini

1. One pair of orbital bristles present. Scutum with three pairs (1+2) of dorsocentral bristles *Meropliosepsis* Duda
- Orbital bristles absent. Scutum with only two pairs (0+2) of dorsocentral bristles 2
2. Postalar bristles absent. Anal vein very short, ending far before the wing margin. Surstyli always asymmetrical *Ajdasepsis* gen. nov.
- One pair of postalar bristles present. Anal vein long, almost reaching wing margin. Surstyli symmetrical or asymmetrical 3
3. Posteroventral area of thorax behind and above the hind coxae between metepimera sclerotized 4
- Posteroventral area of thorax behind and above hind coxae between metepimera membranous; if sclerotized, then basal costal cell and basal half of costal cell clear 5
4. Scutum partly or mostly shining. Fore coxa yellow *Palaeosepsis* Duda
- Scutum completely pruinose. Fore coxa black *Pseudopalaeosepsis* Ozerov
5. Alula narrow (Fig. 66). Margin of upper calypter without hairs. Abdomen strongly constricted after tergite 1+2 *Palaeosepsioides* Ozerov
- Alula broad (Figs. 90, 98, 105). Margin of upper calypter with long hairs. Abdomen not constricted after tergite 1+2 *Phalacrosepsis* gen. nov.

Ajdasepsis, gen. n.

Type-species: *Sepsis armillata* Melander et Spuler, 1917.

DESCRIPTION. Head somewhat flattened dorsoventrally or roundish. Frons shining. Gena narrow to moderate. Eye in profile roundish. Ocellar, postocellar, inner vertical, and outer vertical paired bristles present; orbital bristles absent. Gena with a row of setulae. Occiput without bristles or setulae. One or two pairs of vibrissae present. First flagellomere approximately 1.5-2 times as long as wide. Arista bare.

Thorax yellow to black. Scutum almost completely shining to brownish pruinose; lower part of proepisternum and proepimeron along ventral margin silvery-grey pruinose; katapisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, and 2 postsutural dorsocentrals; postpronotal, postalar, and acrostichal bristles absent; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Fore femur in male modified or simple, in female always simple. Hind tibia of male without an osmeterium.

Wing clear completely or darkened in apical third. Basal costal cell and basal half of costal cell very often dark brown. Anal vein very short, ending far before wing margin; *bm-cu* crossvein present. Alula narrow, entirely covered with microtrichia. Margin of upper calypter with hairs. Margin of lower calypter without hairs.

Abdomen not constricted after tergite 1+2, without strong bristles; sternite 4 of male rounded to ovoid, setose, with or without lateral lobes; sternite 5 represented by one or two plates. Surstyli almost asymmetrical.

DIAGNOSIS. *Ajdasepsis* differs from the other genera of Palaeosepsini by the absence of a postalar bristle on the scutum and by the very short anal vein ending far before the wing margin.

Key to species of *Ajdasepsis*

1. Scutum mostly shining 2
- Scutum mostly pruinose 3
2. Male: fore femora ventrally with deep cavity before tubercle (Figs. 17,18); sternites 4 and 5 as in Fig. 20; epandrium and surstyli as in Figs. 21-23 *A.furcata* (Melander et Spuler)
- Male: fore femur simple (Figs. 49,50); sternites 4 and 5 as in Fig. 52; epandrium and surstyli as in Figs. 53-55 *A.steyskali* (Ozerov)
3. Wing darkened in apical quarter (Fig. 44). Male: sternites 4 and 5 as in Fig. 45; epandrium and surstyli as in Figs. 46-48 ... *A.simplicula* (Steyskal)
- Wing not darkened in apical quarter 4
4. Male: fore coxa, except for bristle near apex on dorsal surface, with black setulae in apical half, between dorsal and posterodorsal surfaces (Fig. 40); fore femur as in Figs. 38,39 *A.pilosicoxa* (Ozerov)
- Male: fore coxa with dorsal bristle near apex only; fore femur different 5
5. Katepisternum silvery-grey pruinose along dorsal margin only, otherwise shiny 6
- Katepisternum greyish pruinose along anterior and posterior margins, and silvery-grey pruinose along dorsal margin. Male: fore femur as in Figs. 24, 25; sternites 4 and 5, epandrium, and surstyli as in Figs. 26-29 *A.limnetica* (Ozerov)
6. Fore femur of male in posterior half with long hairs anteroventrally (Fig. 9) *A.curranii* (Ozerov)
- Fore femur of male in posterior half without long hairs anteroventrally 7
7. Male: fore femur ventrally with deep cavity before tubercle (Figs. 30-32); sternites 4 and 5 as in Fig. 34; epandrium and surstyli as in Figs. 35-37 *A.mitis* (Curran)

- Fore femur of male ventrally without cavity before tubercle (Figs. 1-3, 11-12) 8
- 8. Male: fore femur as in Figs. 1-3; sternites 4 and 5 as in Fig. 5; epandrium and surstyli as in Figs. 6-8 *A.armillata* (Melander et Spuler)
- Male: fore femur as in Figs. 24,25; sternites 4 and 5 as in Fig. 26; epandrium and surstyli as in Figs. 27-29 *A.fulva* sp.n.

Ajdasepsis armillata (Melander et Spuler) Figs.1-8.

Sepsis armillata Melander et Spuler, 1917 : 18.

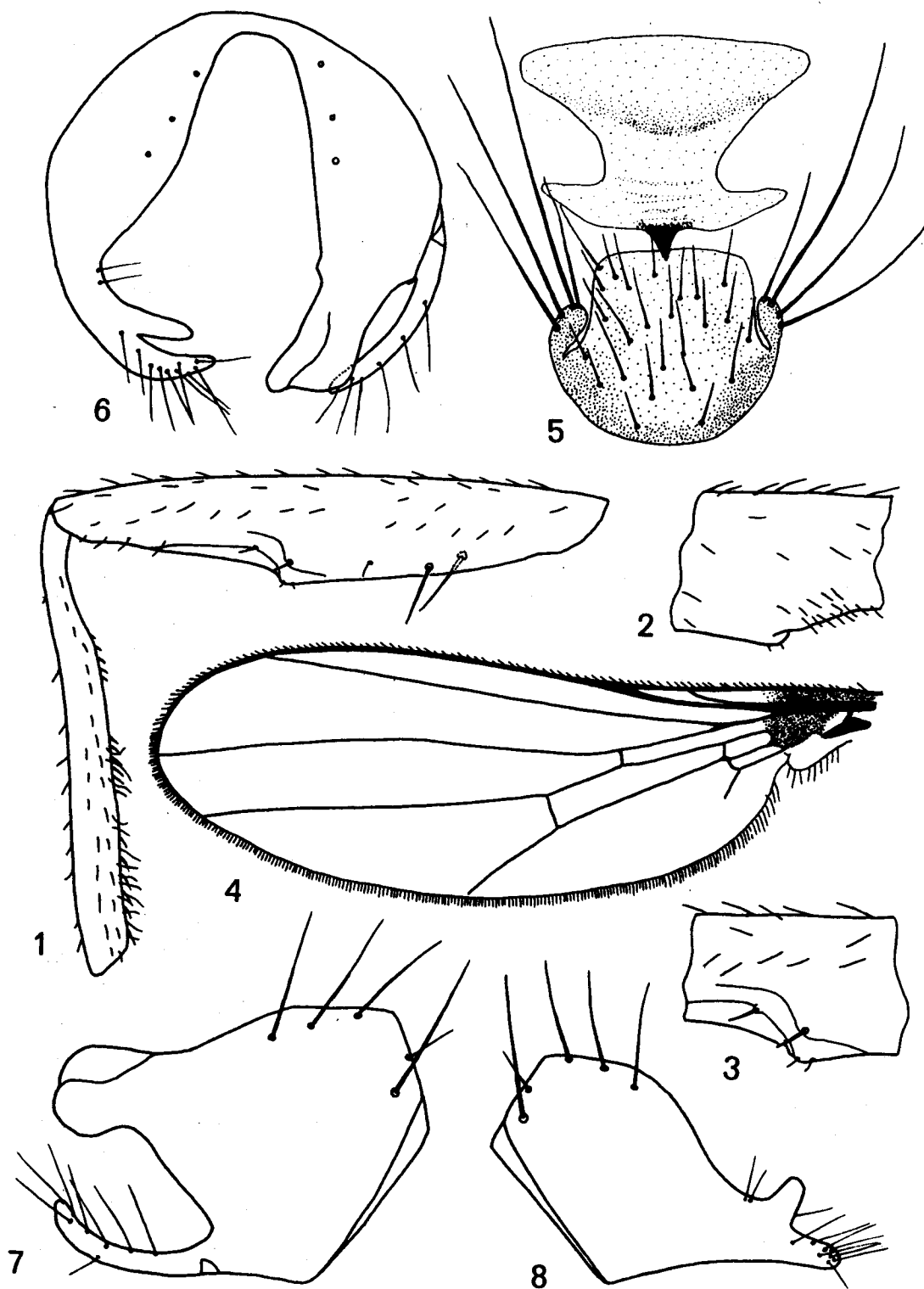
Sepsis inflexa Becker, 1919 : 215 - syn.n.

DESCRIPTION. MALE, FEMALE. Head somewhat flattened dorsoventrally, yellow to black, only face always yellow. Frons shining; face, gena, antennal groove, and postcranium weakly grey pruinose. Gena subequal to half width of first flagellomere. Eye in profile roundish. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of thin setulae. 1 vibrissa. Antenna yellow to black. First flagellomere microtomentose, approximately 2 times as long as wide. Arista yellow to black, bare.

Thorax yellow to black. Scutum and scutellum brownish-grey pruinose; lower part of notopleuron and proepimeron along ventral margin silvery-grey pruinose; proepisternum greyish pruinose; upper part of proepimeron, anepisternum, anepimeron, metepisternum, and mediotergite shining; katepisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny; katepimeron and meron greyish pruinose; katatergite and anatergite grey pruinose. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, and 2 postsutural dorsocentrals; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Foreleg yellow, only tarsomeres 4 and 5 sometimes blackish; basal third of mid and hind femora yellow, other parts of respective legs brownish to black; basal half of mid tibia yellow, apical portion brownish to black; hind tibia brownish to black, only at apex yellow; tarsomeres 1-3 of midleg and hindleg yellow, all tarsomeres 4 and 5 black. Fore coxa with a dorsal bristle near apex; male fore femur modified as in Figs. 1-3; mid tibia with an anteroventral bristle in apical third and with the following apical bristles: anteroventral, posteroventral, and small anterodorsal.

Wing (Fig. 4) clear, only basal costal cell and basal quarter of costal cell dark brown; veins brown.



Figs. 1-8. *Ajdasepsis armillata*, ♂: 1 - foreleg, posterior view; 2 - fragment of fore femur, anterior view; 3 - same, posterior view; 4 - wing; 5 - abdominal sternites 4 and 5; 6 - epandrium and surstyli, dorsal view; 7 - epandrium and surstylus, right lateral view; 8 - same, left lateral view.

Anal vein short, ending far before wing margin. Alula narrow. Calypters and their margins white to blackish. Margin of upper calypter with hairs; margin of lower calypter without hairs. Halter white.

Abdomen brownish to black, shining, constricted after tergite 1+2, without strong bristles; tergites 4 and 5 each usually with several thin marginal setulae; sternite 4 and 5 of male as in Fig. 5. Epandrium and surstyli yellow to black; surstyli asymmetrical as in Figs. 6-8.

Length of body: 2.2-3.6 mm. Length of wing: 1.8-2.7 mm.

MATERIAL EXAMINED. TYPE. Lectotype and paralectotype of *S. armillata*, both ♂♂, labelled "Hayti" (USNM); lectotype and 2 paralectotypes of *S. inflexa*, all ♂♂, labelled "Equateur, Cuenca, Dr. G. Rivet, 1905" (MNHN), and 1 paralectotype of *S. inflexa*, ♀, labelled "Equateur, Yausai (3740 m. d'alt), P. Rivet, 1904". OTHER SPECIMENS (227 ♂♂, 184 ♀♀, dates and collectors' names omitted). ANTILLES: ANTIGUA, St. John's (ZMC); CUBA, Herradura (AMNH); DOMINICA, Clarke Hall (USNM), Grand Bay (USNM), Roseau (AMNH, USNM), Springfield Plantation (USNM), Sylwania (USNM), Toucari (USNM). GUADELOUPE, Point a Pitre (AMNH). GRENADA (USNM); HAITI (DOMINICAN REPUBLIC), 9 km S Loma de Cabrera, 620 m, (CMNH), Jarabacoa (USNM); JAMAICA, Runaway Bay (USNM), Negril Beach (USNM), Hardwar Gap (USNM), ca 6 km N Quick Step, nr. Come Night Cave (USNM); PUERTO RICO, Barranquitas (USNM), Coamo Springs (AMNH), Mayaguez (AMNH), Naguabo (AMNH), San Juan (ZMC, USNM); VIRGIN ISLANDS, St. Thomas, Charlotte Amalie (AMNH). ARGENTINA, Alto Parana: Curitiba (USNM); Corrientes: Manantioles (IZML); Misiones: Ignacio (USNM), Posadas (USNM); Tucuman: Tafi del Yalle (IZML). BRASIL, Minas Gerais: Ouro Preto (USNM); Para: Alcobaca, R. Tocantins, (USNM), Belem (AMNH, USNM) Parana: Foz do Iguacu (USNM); Rio de Janeiro: Petropolis (USNM), Rio de Janeiro (AMNH, USNM); Santa Catarina: Itajai (USNM); Sao Paulo: Sao Paulo (ZMUM), Sao Vicente (USNM). COSTA RICA, Alajuela: La Virgen del Socorro nr. Carriblanca ca. 700m (AMNH); Cartago: Cartago (AMNH, USNM), Turrialba, 600-700m (AMNH, USNM); Turrialba, Heredia: Heredia (AMNH); San Jose: San Isidro, 7-800 m (ZMC), San Jose (AMNH, ZMC, USNM); EL SALVADOR, La Libertad: 3 mi E of La Libertad (USNM); La Libertad (AMNH, USNM), Santa Tecla (= Nueva San Salvador) (USNM); San Salvador: Los Chorros W San Salvador (AMNH), San Salvador (USNM); ECUADOR, Chimborazo: Bugna (USNM); Guayas: Cuatro Hermanitos Exp. Farm (USNM), Naranjal (USNM); Loja: Catamayo (USNM); Napo: Lago Agrio (146 km West) (USNM). GUATEMALA, Alta Verapaz: Coban (AMNH), Chimaltango: Yepocapa (USNM); El Peten: Tikal ruins (USNM); Escuintla: Escuintla (AMNH); Izabal: Puerto Barrios (USNM); Quezaltenango: Quezaltenango (USNM); Saca Tepequez: Antigua (ZMC, USNM); Suchitepequez: Quixchaya (AMNH). GUYANA, Essequibo: Takutu Montains

(USNM). HONDURAS, Francisco Morazan: Tegucigalpa (AMNH); Yoro: Morazan (USNM). MEXICO, Campeche: Campeche (USNM), Champaton (USNM); Chiapas: El Triunfo, 49 km S Jaraltenango, 1300-2000 m (USNM), Yaxoquintela, 560 m (CMNH); Guerrero: Taxco (USNM); Michoacan: Huetamo Hgwy 15 (USNM), Uruapan (AMNH); Morelos: Cuernavaca (USNM); San Luis Potosi: Tamazunchale (USNM); Tabasco: Villahermosa (USNM); Veracruz: Cordoba (USNM), Jalapa (USNM); PANAMA, Chiriqui: 2,6 km S Guabala on Rio Jacube, 5 m (USNM); Cocle: El Valle (USNM); Colon: Colon (USNM); Panama: Barro Colorado Isld. (AMNH, USNM). PARAGUAY, Central: Asuncion (USNM), Luque (USNM), San Lorenzo (USNM). PERU, Cuzco: Buenos Aires, 53 km W Pilcopata, 2280 m (USNM), Machu Picchu, 2300 m (AMNH), Pilcopata (USNM); Huanuco: Cochicote (USNM); Junin: Estancia Naranjal San Ramon, 1000 m (AMNH); Lima: Canete (USNM); Loreto: Iquitos (USNM). SURINAME, Raleigh, Vallen-Voltzberg Res, Foengoe (AMNH), Raleigh, Vallen-Voltzberg Res, Voltzberg Camp., 90m (AMNH). VENEZUELA, Barinas: Barinitas (USNM); Sucre: 7 km NW Sn. Vicente (USNM); Zulia: Rosario (USNM), highway 6 at Rio Lora, 79 km S Machiques (USNM).

RANGE. Antilles, Argentina, Brasil, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Panama, Paraguay, Peru, Suriname, Venezuela.

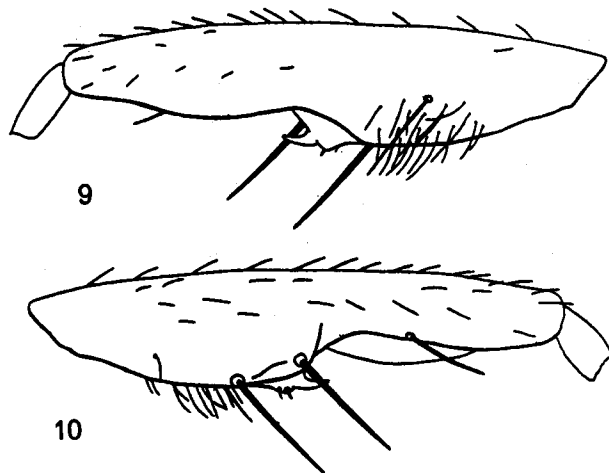
NOTE. I have discovered the specimens of *A. armillata* with yellow body only in Dominica. The lectotype of *S. armillata* was designated by Steyskal [1967], and that of *S. inflexa* by Ozerov [1992].

Ajdasepsis currani (Ozerov)

Figs. 9, 10.

Palaeosepsis currani Ozerov, 1993 : 70.

DIAGNOSTIC DESCRIPTION. MALE. Head and eye in profile roundish. Gena subequal to



Figs. 9-10. *Ajdasepsis currani*, ♂: 9 - right fore femur of holotype, anterior view; 10 - same, posterior view.

quarter width of first flagellomere, the latter approximately 1.5 times as long as wide. Thorax black. Scutum weakly brownish pruinose, except for shining postpronotal lobes and supra-alar area above notopleura. Fore coxa with a dorsal bristle in apical third; fore femur modified as in Figs. 9, 10. Surstyli asymmetrical.

Length of body: 2.7-2.8 mm. Length of wing: 1.8 mm.

FEMALE unknown.

MATERIAL EXAMINED. TYPE. Holotype, ♂, labelled "Barro Colorado, Canal Zone, 5.I.1929, coll. C.H. Curran" (AMNH). Paratype: ♂, same data as in holotype, 4.I.1929 (ZMUM).

RANGE. Panama.

Ajdasepsis fulva sp.n.

Figs. 11-16.

DESCRIPTION. MALE. Head flattened dorsoventrally. Frons brown, sometimes partly yellow anteriorly. Face, gena, subgena, and postcranium yellow, but upper half or third of postcranium brown; antennal groove blackish. Frons shining; face and gena matt; antennal groove and postcranium grey pruinose. Gena subequal to one third of the width of first flagellomere. Eye in profile roundish. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of thin setulae. 1 vibrissa. Antenna dark brown, only first flagellomere on inner surface reddish-yellowish. First flagellomere microtomentose, approximately 1.5 times as long as wide, with a black, bare arista.

Thorax reddish-yellow. Scutum delicately grey pruinose; proepisternum delicately grey pruinose but near ventral margin silvery pruinose; proepimeron mostly silvery-grey pruinose; anepisternum and anepimeron shining; katapisternum with a stripe of dense silvery pruinosity along dorsal margin, broader posteriorly, otherwise shiny; meron and metepimeron greyish pruinose; katatergite, anatergite and scutellum grey pruinose; mediotergite subshining but greyish pruinose along lateral margins. Scutum with a row of thin hairs along each line of *acr*, *dc*, and *ial*, and with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, and 2 postsutural dorsocentrals; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Legs yellow, only apical third of mid tibia, apical half of hind tibia, and tarsomeres 4 and 5 of all legs brown. Fore coxa with a dorsal bristle near apex;

male fore femur modified as in Figs. 11, 12; mid tibia with an anteroventral bristle in apical third, with the following apical bristles: anterior, ventral, and small dorsal.

Wing with weak brownish tinge; veins black. Anal vein short, ending far before wing margin. Alula narrow. Calypters and their margins brownish. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter yellowish.

Abdomen yellow to brown, shining, constricted after tergite 1+2, without strong bristles; tergites 3-5 each with a row of long marginal setulae; sternites 4 and 5 as in Fig. 13. Epandrium and surstyli reddish-brown; surstyli asymmetrical (Figs. 14-16).

Length of body: 3.4-4.3 mm. Length of wing: 2.9-3.3 mm.

FEMALE unknown.

DIAGNOSIS. Resembling *P. armillata* (yellow form) but differing from it by the structure of male foreleg and genitalia.

TYPE MATERIAL. Holotype: ♂, "Peru: Loreto: San Antonio, 22.VIII.1965, J.C. Hitchcock" (USNM). Paratype: ♂, "Venezuela: San Esteban, XII.1939, P.J. Anduze" (ZMUM).

RANGE. Peru, Venezuela.

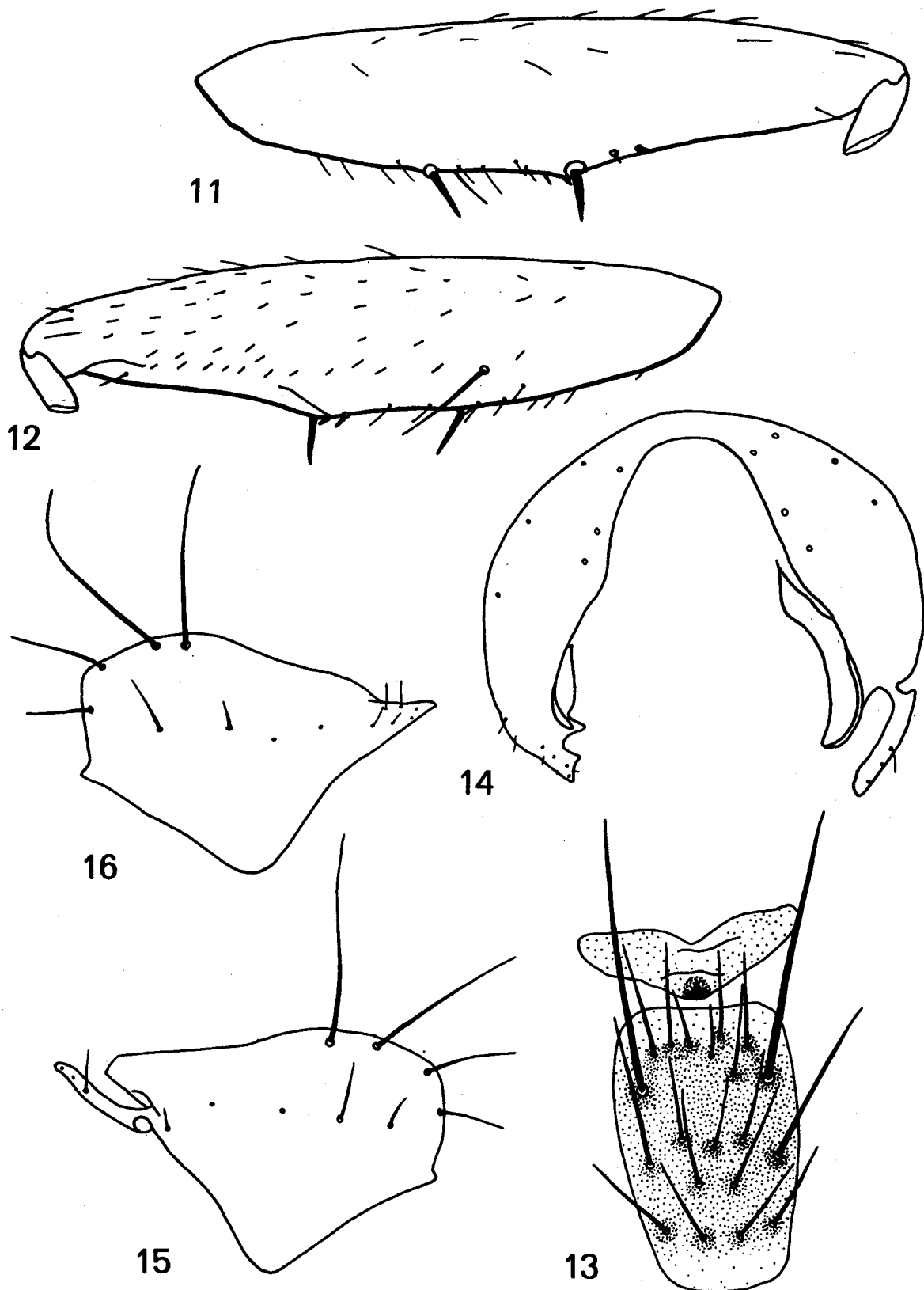
Ajdasepsis furcata (Melander et Spuler)

Figs. 17-23.

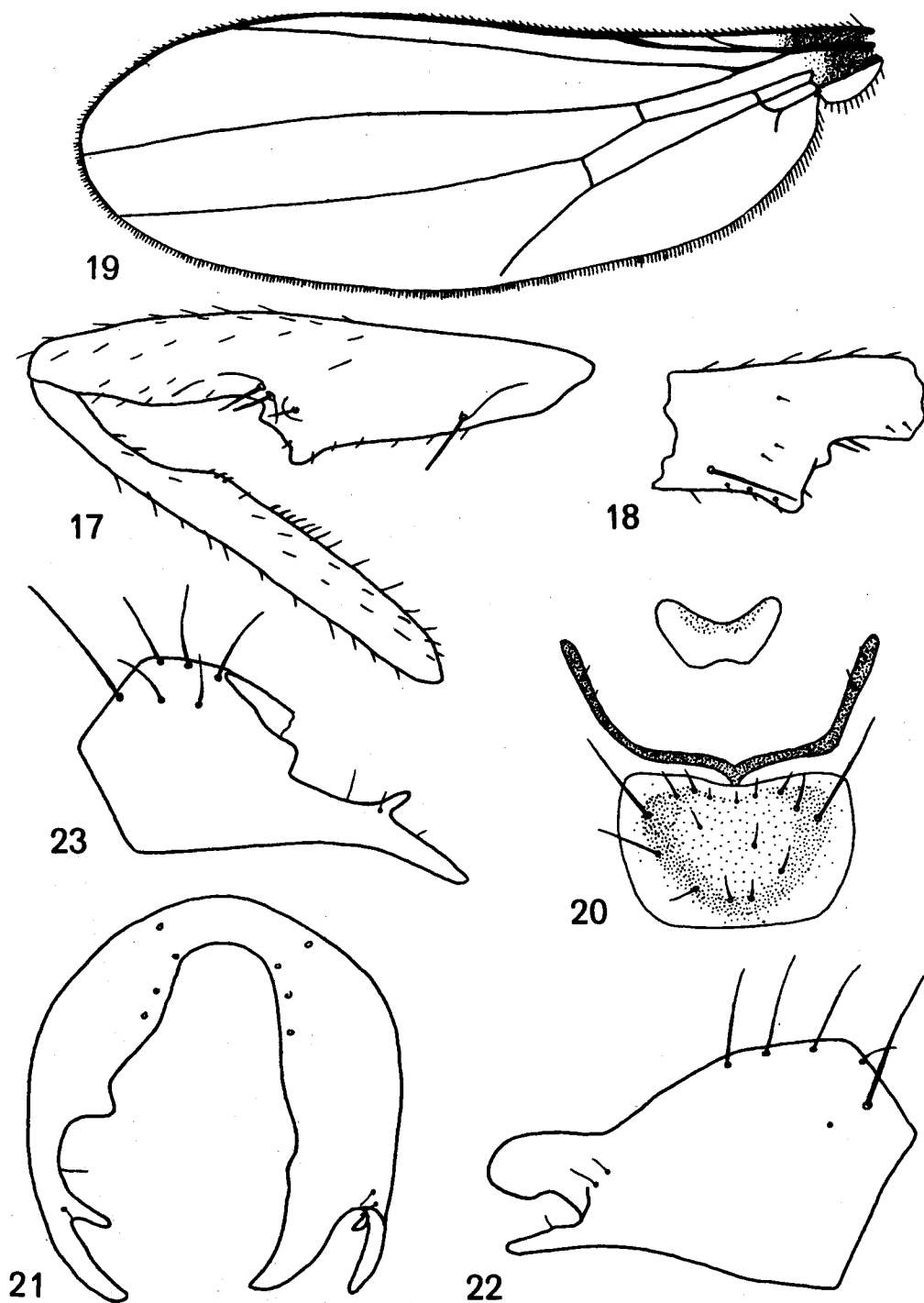
Sepsis furcata Melander et Spuler, 1917: 19.

DESCRIPTION. MALE, FEMALE. Head and eye somewhat flattened dorsoventrally. Frons black, sometimes narrowly brownish anteriorly; face yellow but partly blackish ventrally; gena yellow; antennal groove and subgena blackish; postcranium black. Frons shining; face, gena, antennal groove, and postcranium greyish pruinose. Gena subequal to third width of first flagellomere. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of thin setulae. 1 vibrissa. Antenna blackish, only first flagellomere on inner surface near base dark reddish. First flagellomere microtomentose, approximately 1.5 times as long as wide, with a black, bare arista.

Thorax black, mostly shining. Scutum between and behind dorsocentral bristles and scutellum brownish pruinose; lower part of notopleuron, proepimeron along ventral margin, and katapisternum along dorsal margin silvery-grey pruinose; meron and katepimeron weakly grey pruinose; katatergite and anatergite grey pruinose. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, and 2 postsutural dorso-



Figs. 11-16. *Ajdasepsis fulva* sp.n., ♂: 11 - fore leg, posterior view; 12 - same, anterior view; 13 - abdominal sternites 4 and 5; 14 - epandrium and surstyli, dorsal view; 15 - epandrium and surstylus, right lateral view; 16 - same, left lateral view.



Figs. 17-23. *Ajdasepsis furcata*, ♂: 17 - foreleg, posterior view; 18 - fragment of fore femur, anterior view; 19 - wing; 20 - abdominal sternites 4 and 5; 21 - epandrium and surstyli, dorsal view; 22 - epandrium and surstylus, right lateral view; 23 - same, left lateral view.

centrals; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Legs mostly yellow, only apical two thirds of mid and hind femora, basal half of mid and hind tibiae, and all tarsomeres 4 and 5 dark brown; often apical half of hind tibia anteriorly and posteriorly brownish. Male fore femur modified as in Figs. 17, 18; mid tibia with an anteroventral bristle in apical third and with the following apical bristles: anteroventral, posteroventral, and small dorsal.

Wing (Fig. 19) clear, only basal costal cell and base of wing dark brown; veins brown. Anal vein short, ending far before wing margin. Alula narrow. Calypters and their margins greyish-white. Margin of upper calypter with long hairs, margin of lower calypter without hairs. Halter white.

Abdomen dark brown to black, shining, constricted after tergite 1+2, without strong bristles. Male: tergites 3-5 each usually with a row of thin marginal setulae; sternite 4 and 5 as in Fig. 20; epandrium and surstyli black, surstyli asymmetrical as in Figs. 21-23.

Length of body: 2.3-3.1 mm. Length of wing: 2.0-2.3 mm.

MATERIAL EXAMINED. TYPE. Lectotype (♂) and 4 paralectotypes (2 ♂♂, 2 ♀♀), labelled "Jamaica" (USNM). OTHER SPECIMENS (250 ♂♂, 188 ♀♀, dates and collectors' names omitted). ANTILLES: CUBA, Soledad (USNM); Havana (AMNH); DOMINICA, Roseau, 0-100 m (AMNH); HAITI (DOMINICAN REPUBLIC), Ciudad Trujillo (= Santo Domingo) (USNM), 9 km S Loma de Cabrera (CMNH), 9.5 km W El Valle (CMNH), Sierra de Neiba just south of crest, 5 km NNW Angel Feliz (CMNH), 7 km NNE Boca de Chavon, at Rio Chavon (CMNH), Constanza (10 km S) (USNM), Paso de la Vaca, Mons. Nouel-Constanza Rd. (USNM), Valle del Rio, (USNM), 23.5 km N Cabo Rojo, 540 m (CMNH), 26 km N Cabo Rojo, 730 m (CMNH), 37 km N Cabo Rojo, 4 km E La Abeja, 1440 m (CMNH), La Abeja, 38 km NHW Cabo Rojo 1250 m (CMNH), 3.3 km N Los Arroyos, 1450 m (CMNH), 18 km N San Jose de Ocoa, 830 m (AMNH); JAMAICA, Annotto Bay (USNM), Hardwar Gap (USNM), Rio Bueno (USNM), Runaway Bay (USNM), 1.5 km S Cousins Cove nr. Cousins Cove Cave ♂1, 50 m (USNM); PUERTO RICO, Adjuntas (AMNH), Arecibo (AMNH), Aguas Buenas (USNM), Barranquitas (USNM), Bayamon (USNM), Cayey (AMNH), Coamo Springs (AMNH), Corozal (USNM), Ensenada Honda (USNM), Henry Bks. (USNM), Mayaguez (AMNH, USNM), Naguabo (AMNH), Trijillo Alto (AMNH), Utuado (USNM); ST. VINCENT, Kingstown (USNM); VIRGIN ISLANDS, St. Thomas, Charlotte Amalie (AMNH), Tortola, Roadtown (ZMC).

ARGENTINA, *Corrientes*: Santo Tome (IZML); *Misiones*: Santa Ana (IZML), Ignacio (USNM); *Tucumari*: Lacavera (IZML), Queb. La Toma (IZML), V. Padre Monti (IZML). BELIZE, *Corozal*: Corozal (USNM). BOLIVIA, *La Paz*: Tumupasa (USNM). BRASIL, *Bahia*: Piraja (USNM); *Mato Grosso do Sul*: Maracaju (USNM); *Rio de Janeiro*: Rio de Janeiro (USNM). COLOMBIA, *Antioquia*: Medellin (USNM); *Bolivar*: Cartagena (USNM); *Meta*: Villavicencio (USNM); *Tolima*: Armero (USNM). COSTA RICA, *Cartago*: Cartago (AMNH), Turrialba (AMNH); *Guanaacaste*: Orosi (AMNH); *Limon*: Limon (USNM); *Puntarenas*: Monte Verde, ca. 1500 m, lower montane wet forest (AMNH); *San Jose*: San Antonio de Escazu, 1300 m (USNM), San Isidro, 7-800 m (ZMC); *San Jose*, Farm la Caja (USNM). EL SALVADOR, *San Salvador*: San Salvador (AMNH). ECUADOR, *Azuay*: Rircay (USNM); *Chimborazo*: Chilicay (USNM); *Cotopaxi*: Quevedo (66 km E) (USNM); *El Oro*: Pinas (USNM), Machala (USNM); *Guayas*: Chobo (USNM), Cone (USNM), Monserrat (USNM), Naranjal (USNM); *Manabi*: Bandurria (USNM). GUATEMALA, *Chimaltenango*: Yepocapa (USNM); *El Peter*: Tikal ruins, (USNM); *Saca Tepequez*: Antigua (ZMC, USNM); *Suchitepequez*: Quixchaya (AMNH). GUYANA, *Demerara*: Linden (AMNH). HONDURAS, *Francisco Morazan*: El Zamorano (USNM), Suyapa (USNM); *Yoro*: Morazan (USNM). MEXICO, *Chiapas*: Tuxtla Gutierrez (USNM), Yaxoquintela 560 m (CMNH); *Colima*: Colima (USNM); *Guerrero*: Ixtapa (Zihuatanejo) (USNM); *Michoacan*: Uruapan (USNM), Uruapan, 1600-1700 m (USNM); *Morelos*: Cuernavaca (USNM); *Nayarit*: Tepic (USNM); *San Luis Potosi*: Barbarita, alt. 1150 m (AMNH); *Veracruz*: Cordoba (USNM), Cordoba (USNM), Laguna Escondida (nr. Est. Biol. Los Tuxtlas) (USNM), Veracruz (USNM). PANAMA, *Panama*: Barro Colorado Isld. (USNM), Bella Vista (USNM), Pedro Miguel, (USNM), Taboga Isld. (USNM); *Chiriqui*: Concepcion (USNM), 3.5 km W Puerto Vidal, Rio Tabasara (USNM). PARAGUAY, *Molinascue* (USNM). PERU, *Huanuco*: Acomayo, 20 km N Huanuco, (USNM); *Loreto*: 12 km N Iquitos (USNM), San Antonio (USNM). VENEZUELA, *Aragua*: Pueto de Cata (USNM); *Barinas*: Caipe, (USNM).

RANGE. Antilles, Argentina, Belize, Bolivia, Brasil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Panama, Paraguay, Peru, Venezuela.

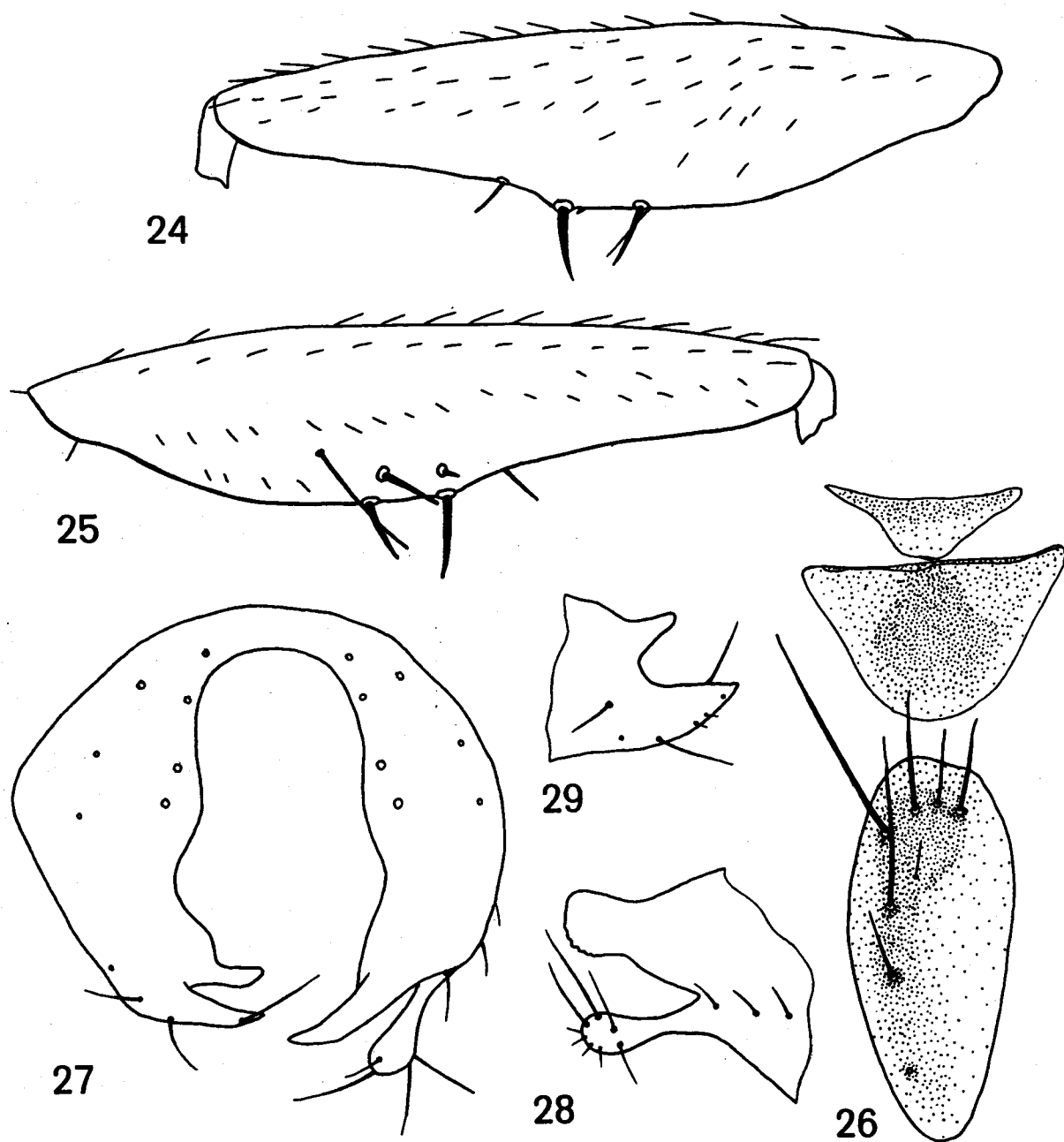
NOTE. The lectotype of *S. furcata* was designated by Ozerov [1992].

Ajdasepsis limnetica (Ozerov)

Figs. 24-29.

Palaeosepsis limnetica Ozerov, 1993 : 70.

DIAGNOSTIC DESCRIPTION. MALE, FEMALE. Head flattened dorsoventrally. Gena subequal to one third of the width of first flagellomere. Eye in profile roundish. First flagellomere approximately 1.5 times as long as wide. Thorax reddish-yellow, only scutum (except for postpronotal lobes)



Figs. 24-29. *Ajdasepsis limnetica*, ♂: 24 - left fore femur of holotype, posterior view; 25 - same, anterior view; 26 - abdominal sternites 4 and 5; 27 - epandrium and surstyli, dorsal view; 28 - surstylus, right lateral view; 29 - same, left lateral view.

and scutellum blackish. Scutum brownish pruinose. Fore coxa with a dorsal bristle near apex; male fore femur modified as in Figs. 24,25. Wing with weak brownish tinge. Sternites 4 and 5 of male as in Fig. 26. Surstyli asymmetrical (Figs. 27-29).

Length of body: 2.8 mm. Length of wing: 2.1 mm.

MATERIAL EXAMINED. TYPE. Holotype, ♂, labelled "Venezuela: Bolivar; 40 km N. of Guasipati, at marsh lake area, 20.III.1982, G.F. & J.F. Hevel" (USNM). OTHER SPECIMENS. ANTILLES: CUBA, Soledad, I.-II.1927 (C.T. & B.B.Brues), 4 ♂♂ (USNM), Soledad, 19.I.1927 (B.Brues), 1 ♂ (USNM); HAITI (DOMINICAN REPUBLIC), 6 km W of Ciudad Trujillo (= Santo Domingo), 16-20.XII.1955 (J.Maldonado Capriles), 1 ♀ (USNM); JAMAICA, Savanna La Mar, 13.III.1970 (W.W.Wirth), 3 ♀♀ (USNM).

RANGE. Antilles, Venezuela.

Ajdasepsis mitis (Curran)
Figs. 30-37.

Sepsis mitis Curran, 1927 : 1.

DESCRIPTION. MALE, FEMALE. Head and eye in profile roundish. Frons and postcranium dark brown to black; face yellow to blackish; antennal groove blackish; gena yellow; subgena black. Frons shining; face, antennal groove, gena, and postcranium greyish pruinose. Gena subequal to one third on the width of first flagellomere. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of thin setulae. 1-2 vibrissae. Antenna blackish, only first flagellomere on inner surface dark reddish. First flagellomere microtomentose, approximately 1.5 times as long as wide, with a black, bare arista.

Thorax black. Scutum weakly brownish pruinose, only lower part of notopleuron silvery-grey pruinose; proepisternum and meron weakly grey pruinose; upper part of proepimeron, anepisternum, anepimeron, katepimeron, metepisternum, and mediotergite shining; lower part of proepimeron silvery-grey pruinose; katepisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny; katatergite and anatergite grey pruinose; scutellum brown pruinose. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, and 2 postsutural dorso-centrals; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Legs yellow, only mid and hind coxae, apical three quarters of mid and hind femora, basal half and apex of mid tibia, hind tibia completely, and all

tarsomeres 4 and 5 dark brown to black. Fore coxa with a dorsal bristle near apex; fore femur of male modified as in Figs. 30-32; mid femur with a row of short thin setulae on anterior surface; mid tibia with an anteroventral bristle in apical third and with the following apical bristles: anterodorsal, anteroventral, and posteroventral.

Wing (Fig. 33) clear, only basal costal cell and base of wing dark brown; veins black. Anal vein short, ending far before wing margin. Alula narrow. Calypters and their margins blackish. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter white.

Abdomen black, shining, constricted after tergite 1+2, without strong bristles; tergites 3-5 each with a row of marginal setulae; sternites 4 and 5 of male as in Fig. 34. Epandrium and surstyli dark brown or black; surstyli asymmetrical as in Figs. 35-37.

Length of body: 2.2-3.7 mm. Length of wing: 1.8-2.9 mm.

MATERIAL EXAMINED. COLOMBIA, Vista Nieve, San Lorenzo Mt., 16.XII.1922 (C.H.Curran), 5 ♂♂, 2 ♀♀ (AMNH). COSTA RICA, *Alajuela*: La Virgen del Socorro nr. Carriblanca ca. 700m, 16.II.1989 (Grimaldi and De Vries), 1 ♂ (AMNH); *Puntarenas*: Monte Verde, ca. 1500 m, lower montane wet forest, 4-11.II.1989 (D.Grimaldi), 6 ♂♂ (AMNH). ECUADOR, *Guayas*: Naranjal, XII.1955 (L.Castillo), 1 ♂ (USNM); *Manabi*: Palmar, 0 10°S, 79 28°W, 200 m, 27.IV.1941, 1 ♂ (AMNH). GUATEMALA, *Chimaltenango*: El Amparo, 4.X.1944, 1 ♂ (AMNH). PANAMA, province?: "Cerro Campana", VII.1967 (W.W.Wirth), 3 ♂♂ (USNM); *Panama*: Barro Colorado Isld., 8.VII.1923 (R.C.Shannon), 2 ♂♂ (USNM); Barro Colo. Nat. Monm., 20.II.-13.III.1985 (D.A.Grimaldi), 1 ♂ (AMNH); Summit, XI.1946 (N.L.H.Krauss), 3 ♂♂ (USNM).

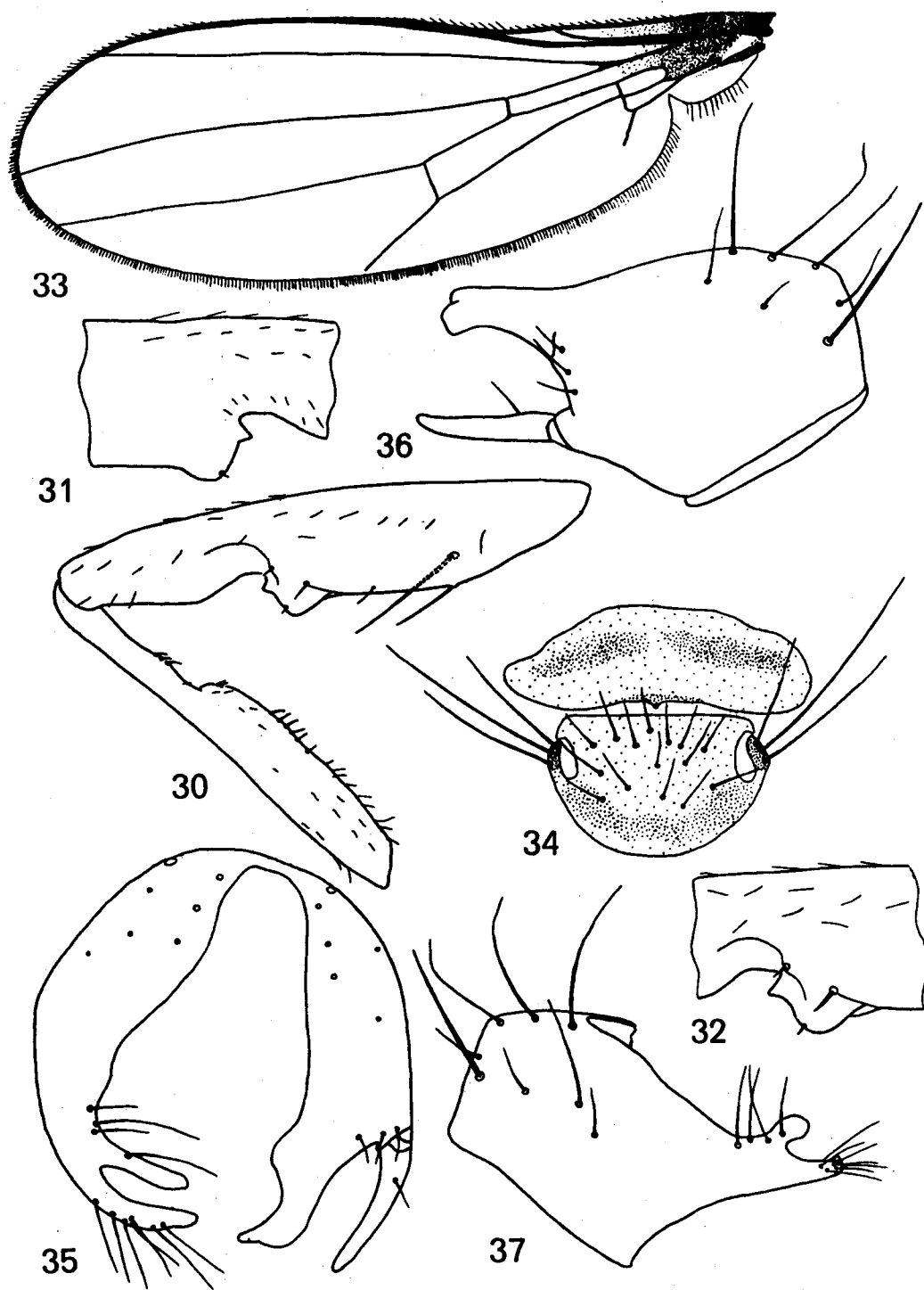
RANGE. Colombia, Costa Rica, Ecuador, Guatemala, Panama.

NOTE. I have not seen the type material of *S.mitis* (26 males and 11 females, "collected by Mr. H.L.Viereck at Vista Nieve, San Lorenzo Mts., Colombia, on December 22, 1922", deposited in AMNH), but only the specimens from the same locality.

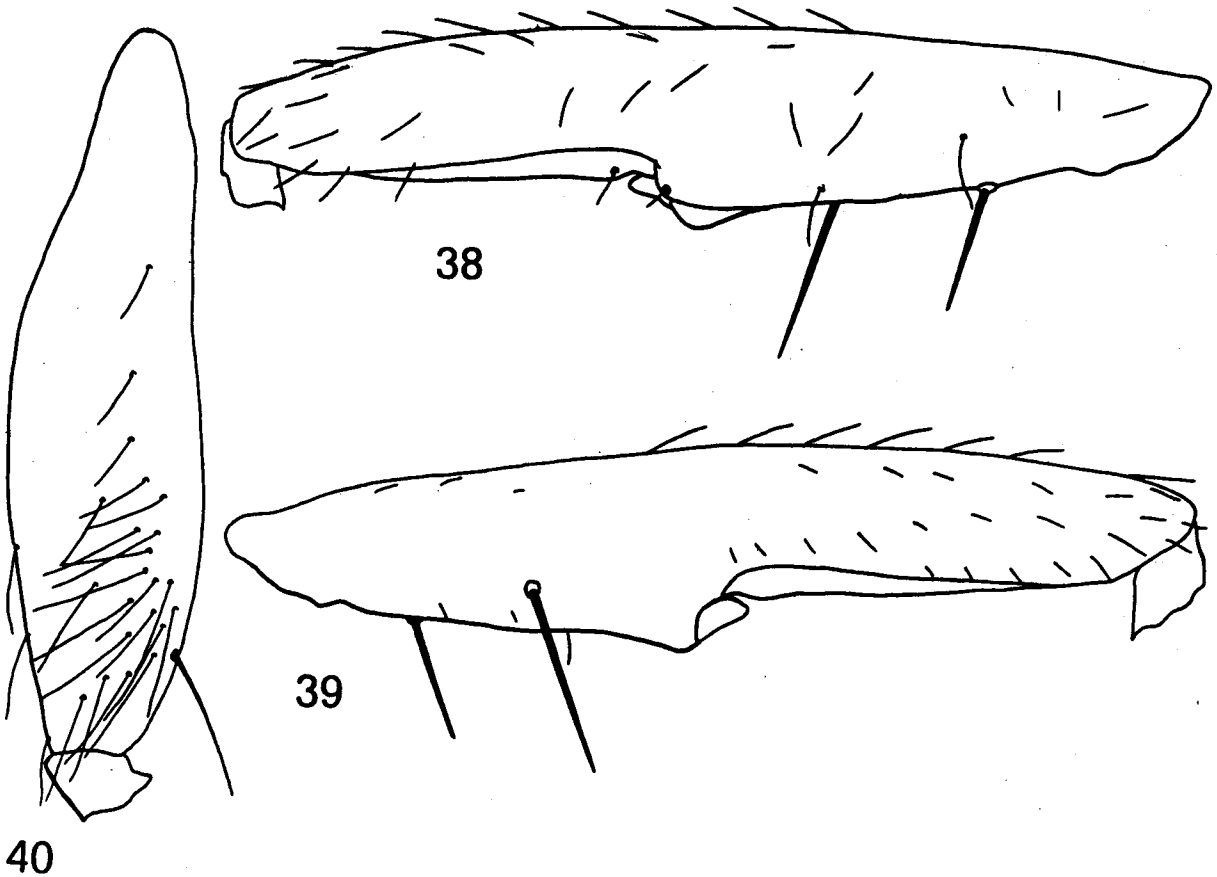
Ajdasepsis pilosicoxa (Ozerov)
Figs. 38-40.

Palaeosepsis pilosicoxa Ozerov, 1993 : 67.

DIAGNOSTIC DESCRIPTION. MALE. Head and eye roundish. Gena subequal to quarter width of first flagellomere. First flagellomere approximately 1.5 times as long as wide. Thorax black. Scutum weakly brownish pruinose, except for shining postpronotal lobes and supra-alar area above notopleura. Fore coxa with black setulae in apical half, between dorsal and posterodorsal surfaces and with one



Figs. 30-37. *Ajdasepsis mitis*, ♂: 30 - foreleg, posterior view; 31 - fragment of fore femur, anterior view; 32 - same, posterior view; 33 - wing; 34 - abdominal sternites 4 and 5; 35 - epandrium and surstyli, dorsal view; 36 - epandrium and surstylus, right lateral view; 37 - same, left lateral view.



Figs. 38-40. *Ajdasepsis pilosicoxa*, ♂: 38 - left fore femur of holotype, posterior view; 39 - same, anterior view; 40 - left fore coxa of holotype, posterior view.

dorsal bristle (Fig. 40); fore femur modified as in Figs. 38, 39. Wing clear, only at base dark brown. Surstyli asymmetrical.

Length of body: 3.3 mm. Length of wing: 2.5 mm.

FEMALE unknown.

MATERIAL EXAMINED. TYPE. Holotype, ♂, labelled "Costa Rica: Alajuela, La Virgen del Socorro nr. Carriablanca, ca. 700 m, 16.II.1989, Grimaldi & De Vries" (AMNH).

RANGE. Costa Rica.

Ajdasepsis simplicula (Steyskal)

Figs. 41-48.

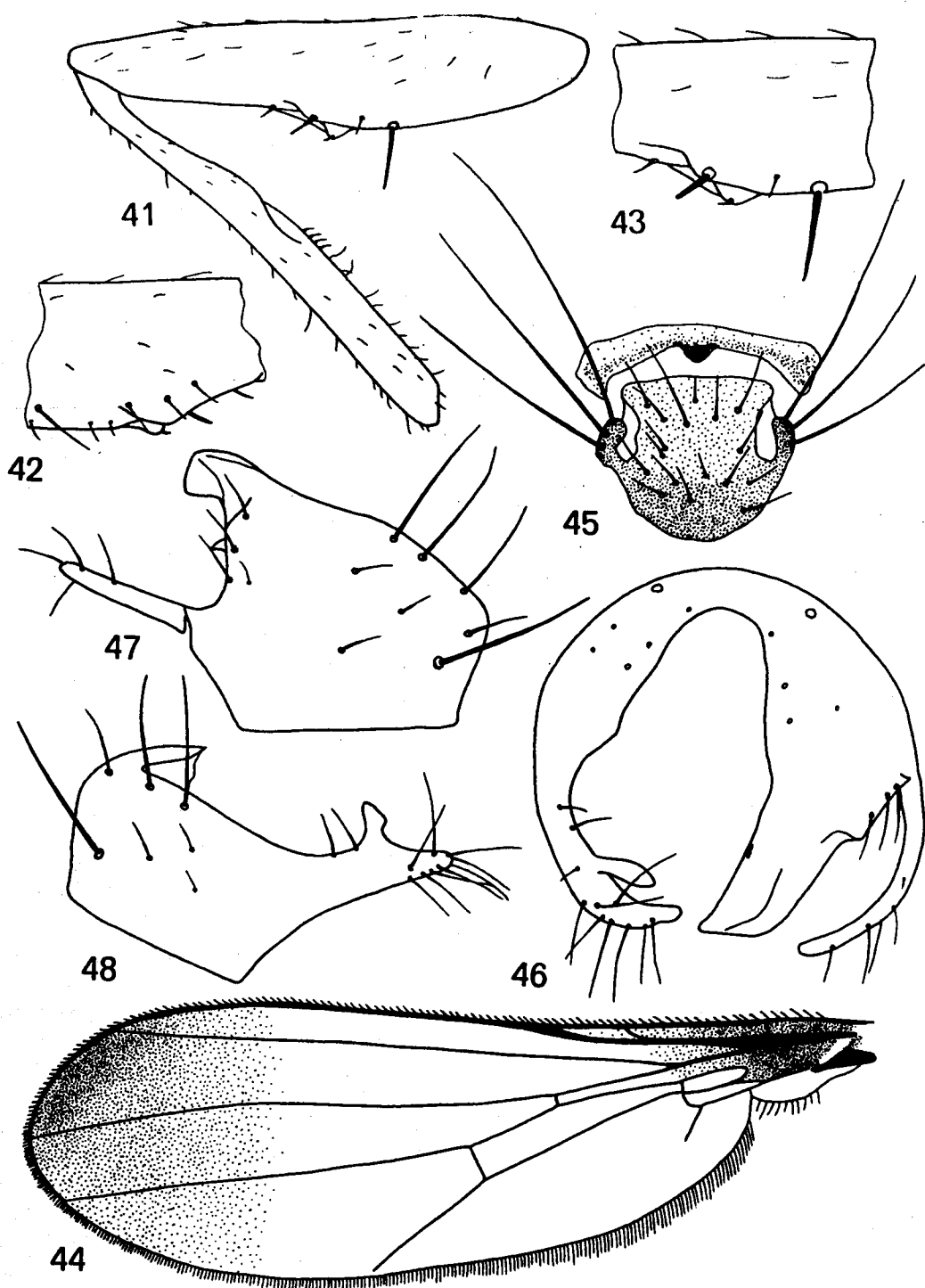
Sepsis simplex Curran, 1928 : 75 (preocc. Goetghebuer et Bastin, 1925).

Palaeosepsis simplicula Steyskal, 1968 : 63.3 (new name for *Sepsis simplex* Curran, 1928 : 75).

DESCRIPTION. MALE, FEMALE. Head and eye in profile roundish. Frons dark brown to black, only partly yellowish anteriorly. Face and gena yellow, subshining; antennal groove blackish; subgena and postcranium black. Frons shining; face and gena subshining; antennal groove and postcranium

greyish pruinose. Gena subequal to one third of the width of first flagellomere. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of thin setulae. 1 vibrissa. Antenna brown, only first flagellomere reddish on inner surface at base. First flagellomere microtomentose, approximately 1.5 times as long as wide, with a black, bare arista.

Thorax black, only postpronotal lobe, proepisternum, anepisternum near anterior spiracle, and anterior part of anepimeron brown. Scutum brownish pruinose, but postpronotal lobe shining and lower part of notopleuron silvery-grey pruinose; proepisternum and meron weakly grey pruinose; upper part of proepimeron, anepisternum, anepimeron, katepimeron, metepisternum, and mediotergite shining; lower part of proepimeron silvery-grey pruinose; katepisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny; katatergite and anatergite grey pruinose; scutellum brown pruinose. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, and 2 postsutural dorsocentrals; anepisternum bearing sparse hairs posteriorly, with a



Figs. 41-48. *Ajdasepsis simplicula*, ♂: 41 - foreleg, posterior view; 42 - fragment of fore femur, anterior view; 43 - same, posterior view; 44 - wing; 45 - abdominal sternites 4 and 5; 46 - epandrium and surstyli, dorsal view; 47 - epandrium and surstylus, right lateral view; 48 - same, left lateral view.

bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Legs yellow. Mid and hind coxae, apical two thirds of mid and hind femora, basal half and apex of mid tibia, hind tibia completely, and all tarsomeres 4 and 5 dark brown to black. Fore coxa without a dorsal bristle near apex, sometimes with a hair; fore femur of male modified as in Figs. 41-43; mid femur with a row of short thin setulae on anterior surface; mid tibia with an anteroventral bristle in apical third and with the following apical bristles: anterodorsal, anteroventral, and posteroventral.

Wing clear, but darkened in apical third (Fig. 44); basal cell and basal costal cell as well as base of wing black; veins black. Anal vein short, ending far before wing margin. Alula narrow. Calypters and their margins whitish. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter white.

Abdomen black, shining, constricted after tergite 1+2, without strong bristles; tergites 3-5 each with a row of marginal setulae; sternites 4 and 5 of male as in Fig. 45. Epandrium and surstyli black; surstyli asymmetrical as in Figs. 46-48.

Length of body: 2.2-5.1 mm. Length of wing: 1.8-4.0 mm.

MATERIAL EXAMINED. TYPE. 4 paratypes (2 ♂♂, 2 ♀♀) of *Ssimplex*, labelled "Adjuntas, P.R., June 26, 1915" (AMNH). OTHER SPECIMENS. ANTILLES: HAITI (DOMINICAN REPUBLIC), *Hato Mayor*: Parque Los Haitises, 3 km W Cueva de Arena, 19° 04'N, 69° 29'W, 20 m, 7-9.VII.1992 (J.Rawlins, S.Thompson, C.Young, and R.Davidson), 1 ♀ (CMNH); *Independencia*: Sierra de Neiba just south of crest, 5 km NNW Angel Feliz, 18° 41'N, 71° 47'W, 1780m, 13-15.X.1991 (J.Rawlins, S.Thompson, C.Young), 2 ♀♀ (CMNH); *Pedernalis*: 26 km N Cabo Rojo, 18° 06'N, 71° 38'W, 730 m, 13-25.VII.1990 (L.Masner, C.Young, and J.Rawlins), 5 ♂♂, 6 ♀♀ (CMNH); 26 km N Cabo Rojo, 18 06'N, 71 38'W, 730 m, 16.VII.1992 (C.Young, R.Davidson, S.Thompson, and J.Rawlins), 8 ♂♂, 17 ♀♀ (CMNH); 37 km N Cabo Rojo, 4 km E La Abeja, 18° 10'N, 71° 37'W, 1440 m, 13-16.VII.1987 (R.L.Davidson and J.E.Rawlins), 3 ♂♂, 13 ♀♀ (CMNH); La Abeja, 38 km NHW Cabo Rojo, 18° 09'N, 71 38'W, 1250 m, 15.VII.1987 (R.L.Davidson and J.E.Rawlins), 1 ♂, 13 ♀♀ (GMNH); 3.3 km N Los Arroyos, 18° 15'N, 71° 45'W, 1450 m, 16-18.IX.1991 (L.Masner, J.Rawlins, and C.Young), 6 ♂♂, 13 ♀♀ (CMNH); HAITI (HAITI), Limbe, Good Samaritan Hospital, 14.IX.1981 (P.Spangler & R.Faitoute), 1 ♀ (USNM); PUERTO RICO, Adjuntas, 20.VI.1915, 2 ♂♂, 2 ♀♀ (AMNH) Bayamon, 28.II.1934 (C.G.Anderson), 2 ♀♀ (USNM); VIRGIN ISLANDS, Tortola, Mt. Sage, 350-450m, 13.VII.1979 (N.L.H.Krauss), 1 ♀ (AMNH).

RANGE. Antilles.

Ajdasepsis steyskali (Ozerov)

Figs. 49-55.

Palaeosepsis steyskali Ozerov, 1993 : 67.

DIAGNOSTIC DESCRIPTION. MALE, FE-MALE. Head somewhat flattened dorsoventrally. Gena subequal to one third of the width of first flagellomere. Eye in profile roundish. First flagellomere about 2 times as long as wide. Thorax black, mostly shining. Notopleuron, lower margin of proepimeron, and katapisternum along dorsal margin silvery-grey pruinose; scutum near scutellum, meron, metepisternum, katatergite, anatergite, and scutellum weakly grey pruinose. Male fore femur modified as in Figs. 49,50. Wing clear, only basal costal cell and basal quarter of costal cell dark brown (Fig. 51). Sternites 4 and 5 of male as in Fig. 52. Surstyli asymmetrical as in Figs. 53-55.

Length of body: 2.1 mm. Length of wing: 1.8 mm.

MATERIAL EXAMINED. TYPE. Holotype, ♂, labelled "Barbarita, S.L.P., alt. 1150 m, 14.VI.1947, W.G.Downs" (AMNH). OTHER SPECIMENS. ANTILLES: DOMINICA, S.Chiltern Est., 2.II.1965 (W.W.Wirth), 2 ♂♂, 1 ♀ (USNM). MONTSERRAT, Galway's Estate, XI.1967 (N.L.H.Krauss), 1 ♂, 1 ♀ (USNM).

RANGE. Antilles, Mexico.

Genus *Meroplioepsis* Duda

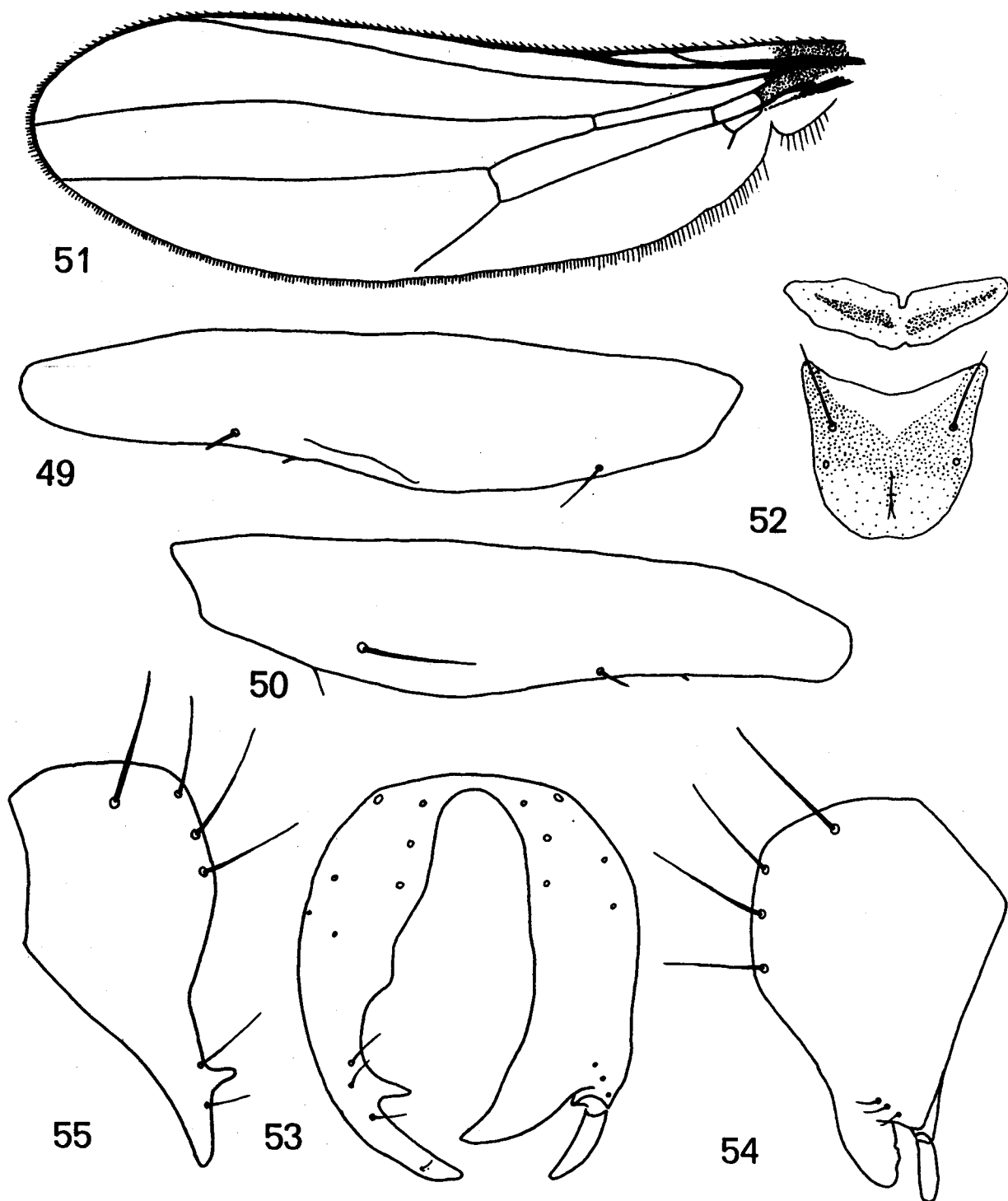
Meroplioepsis Duda, 1926a : 28. Type-species: *Meroplioepsis sexsetosa* Duda, 1926 (mon.)

DIAGNOSTIC DESCRIPTION. Head in profile roundish. Frons bare. Gena moderate. Eye in profile slightly higher than long. Orbital, ocellar, postocellar, inner vertical, and outer vertical paired bristles present. Occiput without bristles or setulae. Two pairs of vibrissae. First flagellomere approximately 1.5 times as long as wide. Arista bare.

Thorax mostly subshining; lower half of proepisternum whitish pruinose; proepimeron along ventral margin silvery-white pruinose; katapisternum with narrow stripe of dense silvery pruinosity along dorsal margin anteriorly and broadly dense silvery pruinose posteriorly. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar as well as 1 presutural and 2 postsutural dorsocentrals; 1 anepisternal and 1 katapisternal bristles present; postpronotal and acrostichal bristles absent. Postcoxal bridge absent.

Fore femur in male modified, in female simple. Hind tibia of male without an osmeterium.

Wing darkened along costal vein between apices of veins R_{2+3} and R_{4+5} ; basal costal cell and basal half of costal cell dark brown. Basal cell more than twice as long as basal costal cell. Anal vein long, almost reaching wing margin; bm-cu crossvein present.



Figs. 49-55. *Ajdasepsis steyskali*, ♂: 49 - fore femur, posterior view; 50 - same, anterior view; 51 - wing; 52 - abdominal sternites 4 and 5; 53 - epandrium and surstyli, dorsal view; 54 - epandrium and surstylus, right lateral view; 55 - same, left lateral view.

Alula moderate, entirely covered with microtrichia. Margin of upper calypter with hairs. Margin of lower calypter without hairs.

Abdomen slightly constricted after tergite 1+2; without strong bristles; sternite 4 of male triangular, with lateral lobes; sternite 5 more or less rectangular, simple (Fig. 60). Surstyli symmetrical.

Meropliosepsis sexsetosa Duda
Figs. 56-62.

Meropliosepsis sexsetosa Duda, 1926a : 28.

Sepsis carnivora Curran, 1934 : 436.

DESCRIPTION. MALE, FEMALE. Body, including antennae and legs reddish-yellow, only abdomen and usually half or two thirds of mid and hind tibiae reddish-brown.

Head in profile roundish. Frons and antennal groove shining; face, gena, and postcranium subshining. Gena approximately 2 times as broad as width of first flagellomere. Eye in profile slightly higher than long. Head with the following paired bristles: 1 orbital, 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of thin bristles. 2 vibrissae. First flagellomere microtomentose, approximately 1.5 times as long as wide, with brownish, bare arista.

Scutum subshining; proepisternum subshining but near ventral margin whitish pruinose; proepimeron shining, with silvery-white pruinosity along ventral margin; anepisternum, anepimeron, and katepimeron shining; katepisternum mostly shining, with narrow stripe of dense silvery pruinosity along dorsal margin anteriorly and broadly dense silvery pruinose posteriorly; meron, metepisternum and scutellum subshining; katatergite, anatergite, and mediotergite greyish pruinose. Scutum with a row of thin and short setulae along each line of acr, and with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 1 presutural and 2 postsutural dorsocentrals; proepisternum with several short hairs near lower margin; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; katepisternum with a row setulae and a bristle near dorsal margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Fore coxa with a dorsal bristle at apex; male foreleg modified as in Figs. 56-58; mid femur with a row of short and thin setulae on anterior surface; mid tibia with anteroventral and posteroventral apical bristles; femur and tibia of hindleg without bristles.

Wing (Fig. 59) with weak brownish tinge, darkened along costal vein between apexes of veins R_{2+3} and R_{4+5} ; basal costal cell and basal half of costal cell dark brown; veins brown. Basal cell more than twice as long as basal costal cell. Anal vein long, almost reaching wing margin. Alula moderate. Calypters and their margins light brownish. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter yellowish.

Abdomen subshining, slightly constricted after tergite 1+2, without strong bristles; sternites 4 and 5 of male as in Fig. 60. Surstyli symmetrical as in Figs. 61, 62.

Length of body: 5.1-6.2 mm. Length of wing: 3.8-4.2 mm.

MATERIAL EXAMINED. TYPE. Paralectotype of *M.sexsetosa*, ♂, with label "Suiza de Turrialba" (MNHU). **OTHER SPECIMENS.** BRASIL, *Mato Grosso do Sul*: Maracaju, V.1937 (S.F.Amarelo), 1 ♀ (USNM); *Para*: Rio Xingu, Camp ca 60 km S Altamira 52°22'W, 3°39'S, 6-8.X.1986 (P.Spangler, O.Flint), 1 ♀ (USNM). COSTA RICA, Higuaito, San Mateo, (P.Schild), 1 ♂ (USNM). GUYANA, *Essequibo*: Kartabo, 25-27.XII.1983 (W.E.Steiner), 1 ♂ (USNM). PANAMA, *Panama*: Barro Colorado Isld., 3.I.1929 (C.H.Curran), 1 ♂, 1 ♀ (AMNH). PERU, *Huanuco*: Tingo Maria, IX.1955 (Th.Dobzhansky, C.Pavan), 1 ♂ (AMNH); *Madre de Dios*: Manu, Erika (near Salvacion), 550 m, 5-6.IX.1988, 1 ♂ (USNM). VENEZUELA, *Amazonas*: Rio Macava Camp, 69°06'W, 2°2'N, 150 m, 16-27.III.1989 (D.A.Grimaldi), 1 ♀ (AMNH).

RANGE. Brasil, Costa Rica, Guyana, Panama, Peru, Venezuela.

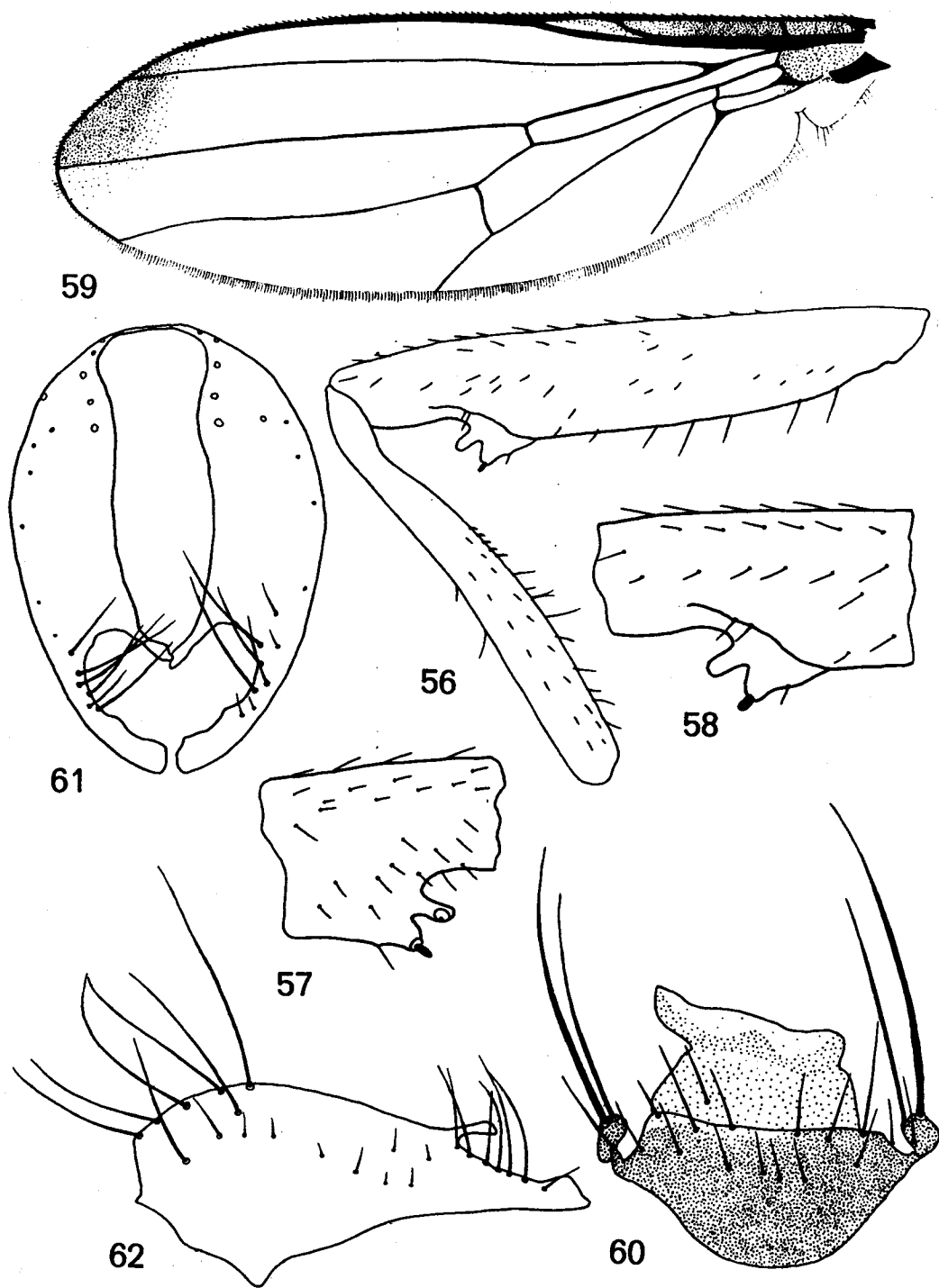
NOTE. Silva [1992] has examined 2 type specimens of *M.sexsetosa* (♂ and ♀) from HNHM and designated the male as the lectotype of this species. She also has examined the holotype of *S.carnivora* and synonymized it with *M.sexsetosa*.

I examined the male type specimen of *M.sexsetosa* from MNHU. It corresponds completely with the original description. That is why it was designated as the lectotype of *M.sexsetosa* [Ozerov, 1992]. However, the work of Silva was published earlier, so the lectotype designated by me must be considered as paralectotype of *M.sexsetosa*.

Genus *Palaeosepsioides* Ozerov

Palaeosepsioides Ozerov, 1992 : 81. Type-species: *Palaeosepsioides grimaldii* Ozerov, 1992 = *erythromyrma* (Silva, 1991) (mon.).

DIAGNOSTIC DESCRIPTION. Head somewhat flattened dorsoventrally. Gena moderate. Eye in profile roundish. Ocellar, postocellar, inner vertical, and outer vertical paired bristles present; orbital bristles absent. Occiput without bristles or setulae. Two pairs of vibrissae. First flagellomere approximately 2 times as long as wide. Arista bare.



Figs. 56-62. *Meroploosepsis sexsetosa*, ♂: 56 - foreleg, posterior view; 57 - fragment of fore femur, anterior view; 58 - same, posterior view; 59 - wing; 60 - abdominal sternites 4 and 5; 61 - epandrium and surstyli, dorsal view; 62 - same, lateral view.

Thorax mostly subshining. Lower part of proepisternum, proepimeron along ventral margin, and a broad stripe along dorsal margin of katepisternum silvery-grey pruinose. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; 1 anepisternal bristle present; postpronotal and acrostichal bristles absent. Postcoxal bridge absent.

Fore femur of male modified, that of female simple. Hind tibia of male without an osmeterium.

Wing clear, only basal costal cell, costal cell as well as base of wing dark brown. Anal vein long, almost reaching wing margin; **bm-cu** crossvein present. Alula narrow, entirely covered with microtrichia. Margins of calypters without hairs.

Abdomen strong constricted after tergite 1+2, without strong bristles; sternite 4 of male extremely long, cordate, with lateral lobes, and sternite 5 very narrow, simple (Fig. 67). Surstyli symmetrical.

Palaeosepsioides erythromyrma (Silva)
Figs. 63-69.

Palaeosepsis erythromyrma Silva, 1991 : 370.

Palaeosepsioides grimaldii Ozerov, 1992 : 81 - syn.n.

DIAGNOSTIC DESCRIPTION. MALE. Body and legs reddish-yellow, only frons, first flagellomere along anterior margin, and abdomen brownish. Head somewhat flattened dorsoventrally. Gena subequal to half width of first flagellomere. Eye in profile roundish. First flagellomere 2 times as long as wide. Scutum, katepimeron, meron, and metepisternum subshining, but meron with a big shining spot in the middle; anepisternum, upper part of proepimeron, anepimeron, and most of katepisternum shining; katatergite and anatergite greyish pruinose; mediotergite shining but greyish pruinose along lateral margins. Fore coxa with a strong dorsal bristle near apex; foreleg modified as in Figs. 63-65; hind femur and tibia without bristles. Wing clear, only basal costal cell, costal cell as well as base of wing dark brown (Fig. 66). Sternites 4 and 5 as in Fig. 67. Surstyli symmetrical as in Figs. 68, 69.

Length of body: 3.7-4.7 mm. Length of wing: 2.6-2.8 mm.

MATERIAL EXAMINED. TYPE. Holotype of *P. grimaldii*, ♂, with label "Venezuela: Amazonas, Rio Mavaca Camp, 65°06'W, 22 N, 150 m, 16-27.III.1989, D. A. Grimaldi" (AMNH).

RANGE. Brasil, Venezuela.

NOTE. I have seen only the holotype of

P. grimaldii but, judging from the original description of *P. erythromyrma*, these species are conspecific.

Genus *Palaeosepsis* Duda

Sepsis, subgen. *Palaeosepsis* Duda, 1926a : 43. Type-species: *Sepsis dentata* Becker, 1919 (Hendel, 1936 : 62).

DIAGNOSTIC DESCRIPTION. Head and eye in profile roundish. Frons bare. Gena narrow to moderate. Ocellar, postocellar, inner vertical, and outer vertical paired bristles present; orbital bristles absent. Occiput without bristles or setulae. Two pairs of vibrissae. First flagellomere approximately 1.5-2.5 times as long as wide. Arista bare.

Thorax black. Scutum either almost completely shining or with a brownish pruinose stripe between lines **dc**. Lateral pleural sclerites shining, only lower part of proepisternum, proepimeron along ventral margin, and katepisternum along dorsal margin silvery-grey pruinose. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; 1 anepisternal bristle present; postpronotal and acrostichal bristles absent. Postcoxal bridge present.

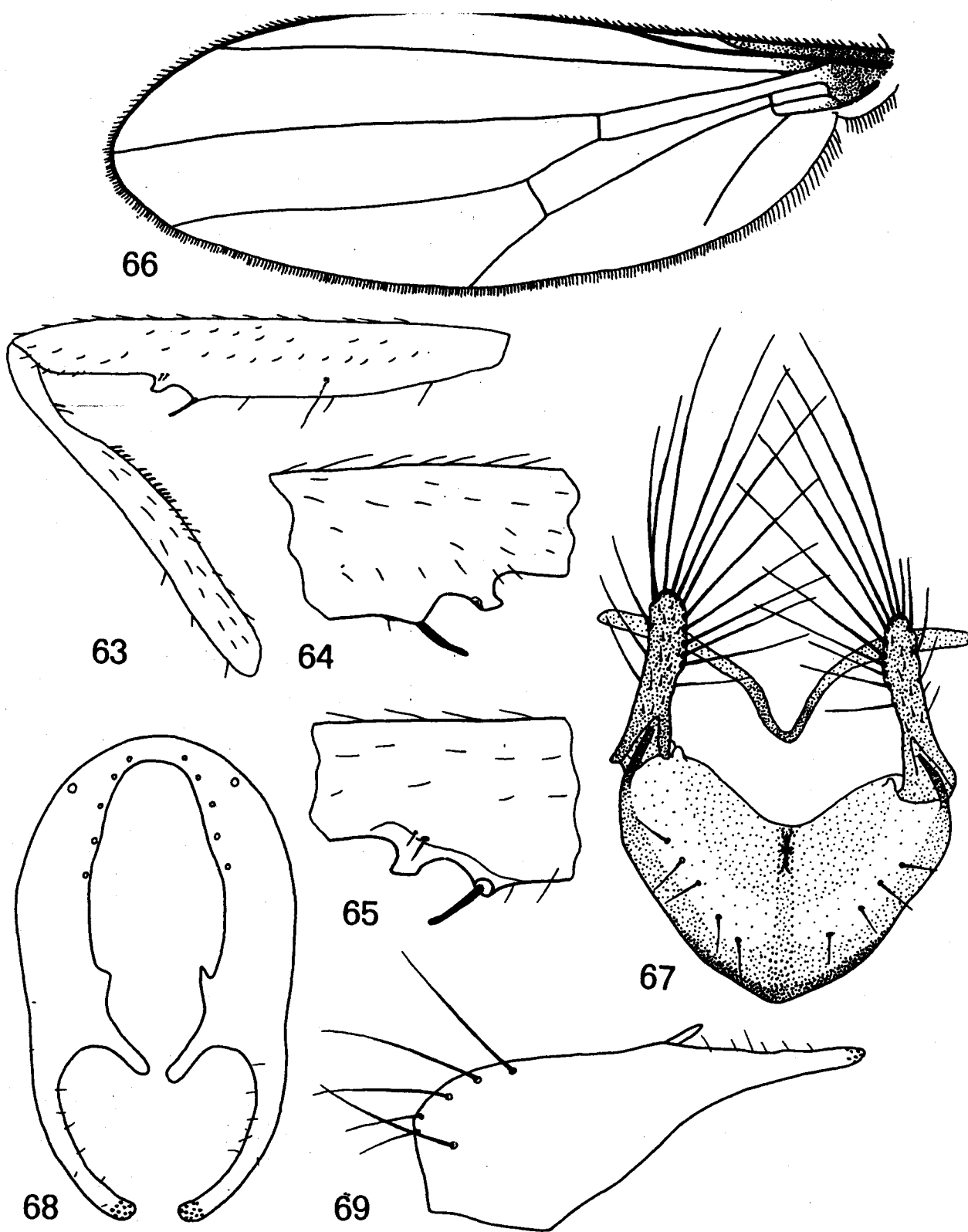
Fore femur of male modified, that of female simple. Hind tibia of male without an osmeterium.

Wing clear completely or darkened at apex; basal costal cell dark brown. Anal vein long, almost reaching wing margin; **bm-cu** crossvein present. Alula narrow, entirely covered with microtrichia. Margin of upper calypter with hairs. Margin of lower calypter without hairs.

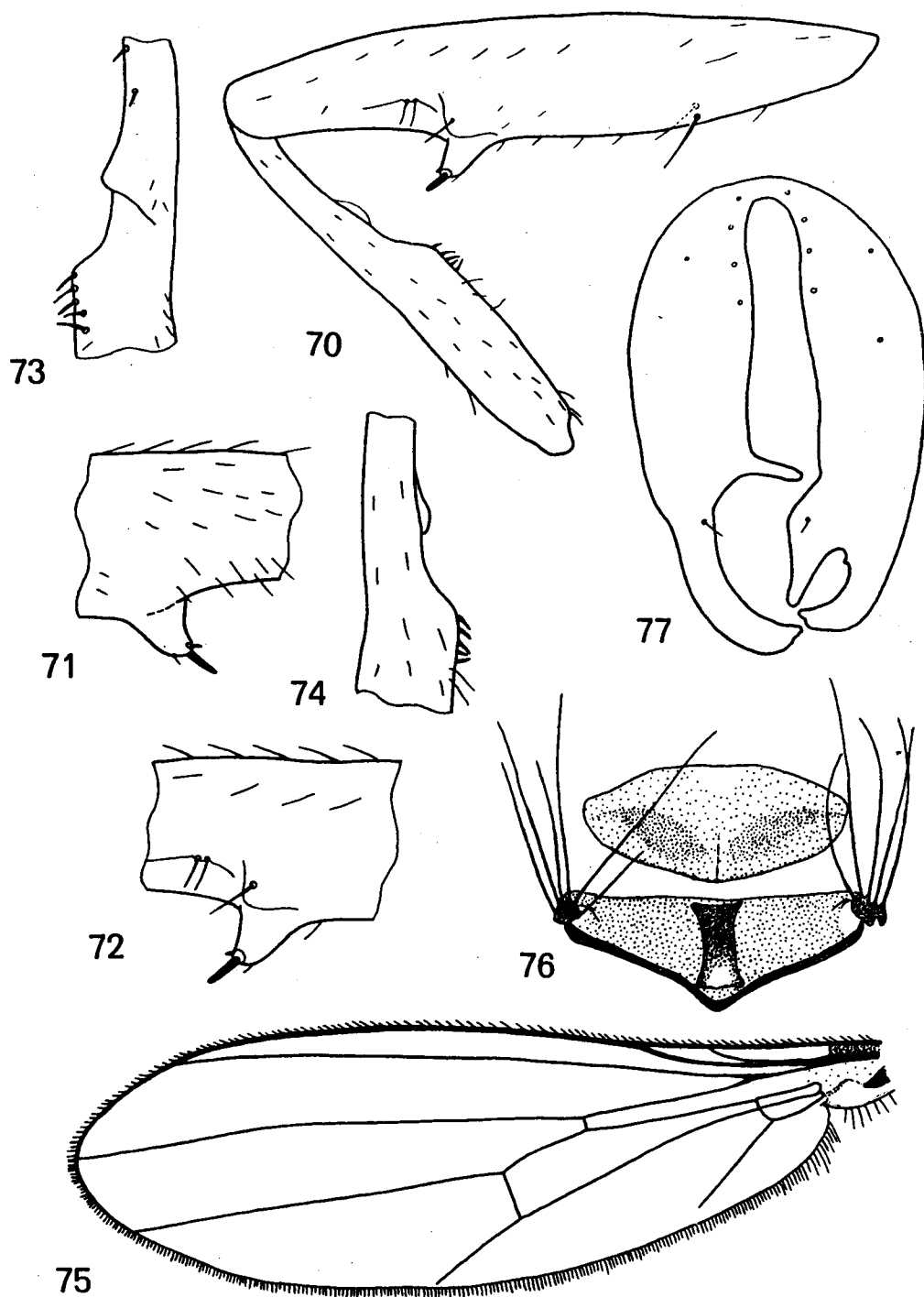
Abdomen not constricted after tergite 1+2, without strong bristles; tergites 3-5 each with a row of thin marginal setulae; sternite 4 of male moderate, with lateral lobes, and sternite 5 triangular or oval, simple (Figs. 76, 83). Surstyli symmetrical or asymmetrical.

Key to species of *Palaeosepsis*

1. Scutum with a stripe of brownish pruinosity between lines of **dc**..... 2
- Scutum brownish pruinose between lines of **dc** behind posterior pair of dorsocentral bristles only *P. dentatiformis* Duda
2. Wing with a dark spot at apex R_{2+3} (Fig. 82). Surstyli symmetrical (Figs. 84, 85) *P. maculata* Duda
- Wing clear, without dark spot at apex (Fig. 75). Surstyli asymmetrical (Fig. 77) *P. dentata* Becker



Figs. 63-69. *Palaeosepsioides erythromyrma*, ♂: 63 - foreleg, posterior view; 64 - fragment of fore femur, anterior view; 65 - same, posterior view; 66 - wing; 67 - abdominal sternites 4 and 5; 68 - epandrium and surstyli, dorsal view; 69 - same, lateral view.



Figs. 70-77. *Palaeosepsis dentata*, ♂: 70 - foreleg, posterior view; 71 - fragment of fore femur, anterior view; 72 - same, posterior view; 73 - fragment of fore tibia, anterior view; 74 - same, posterior view; 75 - wing; 76 - abdominal sternites 4 and 5; 77 - epandrium and surstyli, dorsal view.

Palaeosepsis dentata (Becker)

Figs. 70-77.

Sepsis dentata Becker, 1919 : 207.

DESCRIPTION. MALE, FEMALE. Head and eye in profile roundish. Frons brown but light brown anteriorly; face yellow, only lower third blackish; antennal groove blackish; gena yellow; subgena and postcranium black. Frons shining; gena subshining; face, antennal groove, and postcranium grey pruinose, only postcranium around inner and outer vertical bristles and along eye shining. Gena approximately 3-3.5 times as broad as first flagellomere in width. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of short setulae. 2 vibrissae. Antenna reddish-brown, only first flagellomere darkened along anterior margin. First flagellomere microtomentose, approximately 1.5 times as long as wide, with a black, bare arista.

Thorax black, mostly shining. Scutum along margin of supra-alar area brownish pruinose, with a stripe of brownish pruinosity between *dc* lines; scutum along margin of notopleural area, lower part of proepisternum, proepimeron along ventral margin, and katepisternum along dorsal margin silvery-grey pruinose; katatergite and anatergite subshining; scutellum brownish pruinose. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; katepisternum with several hairs near dorsal margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera sclerotized, forming postcoxal bridge.

Legs yellow, only mid and hind femora, except for their basal and apical quarter, basal third of mid tibia, basal half of hind tibia, and tarsomeres 4 and 5 of all legs brown. Fore coxa with a dorsal bristle near apex; male fore femur and tibia as in Figs. 70-74; mid femur with a short row of thin setulae on anterior surface; mid tibia with an anteroventral bristle in apical third and the following apical bristles: anteroventral, posteroventral, and small dorsal; femur and tibia of hindleg without bristles.

Wing (Fig. 75) clear, not darkened at apex; basal costal cell dark brown; veins brown. Anal vein long, almost reaching wing margin. Alula narrow. Calypters and their margins brownish-yellow. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter yellow.

Abdomen black, shining, not constricted after tergite 1+2; without strong bristles; tergites 3-5 each

with a row of marginal setulae; sternites 4 and 5 of male as in Fig. 76. Surstyli asymmetrical (Fig. 77).

Length of body: 3.4-4.1 mm. Length of wing: 3.0-3.7 mm.

MATERIAL EXAMINED. TYPE. Holotype, ♂, labelled "Ecuator: Cuenca, alt.: 2532 m; Rivet, 1905" (MNHN). **OTHER SPECIMENS.** ARGENTINA, Tucuman: Queb. Cainzo, 18-19.XII.1950 (R.Golbach), 1 ♂ (IZML); Queb. La Toma, 21.XII.1950 (R.Golbach), 1 ♀ (IZML).

RANGE. Argentina, Ecuador.

NOTE. The right midleg, right hindleg, and first flagellomere of the holotype are lost.

Palaeosepsis dentatiformis (Duda)*Sepsis (Palaeosepsis) dentatiformis* Duda, 1926a : 46.

DESCRIPTION. FEMALE. Head and eye in profile roundish. Upper half of frons black, lower portion brown; face and gena yellow; subgena and postcranium black; antennal groove blackish. Frons shining; gena subshining; face and antennal groove weakly grey pruinose; postcranium delicately grey pruinose, only dorsally and along eye shining. Gena very narrow, approximately 6 times as broad as first flagellomere in width. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of short setulae. 2 vibrissae. Scape and pedicel brown. First flagellomere greyish-black, only at base reddish, microtomentose, 2 times as long as wide. Arista bare, black, only at base brownish.

Thorax black, mostly shining. Scutum along margin of supra-alar area and between *dc* lines behind posterior pair of dorsocentral bristles brownish pruinose; scutum along margin of notopleural area, lower part of proepisternum, proepimeron along ventral margin, and katepisternum along dorsal margin silvery-grey pruinose; scutellum brownish pruinose. Scutum with a row of thin hairs between *acr* lines, a row of thin hairs along each *dc* line, and the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; katepisternum with several hairs near dorsal margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera sclerotized, forming postcoxal bridge.

Legs brown, but fore tibia, base of hind femur, and all tarsi yellow. Fore coxa with a dorsal bristle near apex; mid femur with a short row of thin setulae on anterior surface apically; mid tibia with an anteroventral bristle in apical third and a strong

posteroventral apical bristle; femur and tibia of hindleg without bristles.

Wing clear, only darkened along costal vein below apex of R_{2+3} ; basal costal cell dark brown; veins brown. Anal vein long, almost reaching wing margin. Alula narrow. Calypters brownish-yellow. Margin of upper calypter yellowish, with long hairs; margin of lower calypter blackish, without hairs. Halter yellow.

Abdomen black, shining, not constricted after tergite 1+2, without strong bristles; tergites 3-5 each with a row of marginal setulae.

Length of body: 4.6 mm. Length of wing: 3.6 mm.

MATERIAL EXAMINED. VENEZUELA, *Merida*: To-var, 7.VIII.1943 (P.Anduze), 1 ♀ (ZMUM).

RANGE. Costa Rica, Venezuela.

NOTE. Two males from HNHM, labelled "Costa Rica, Suiza de Turrialba", were used as material for the original description of *S. (Palaeosepsis) dentatiformis*. I have not examined the type material. Dr. L.Papp informed me that he failed to locate these specimens in the HNHM collection. Neither were those specimens discovered in the MNHU collection.

Palaeosepsis maculata (Duda)

Figs. 78-85.

Sepsis (Palaeosepsis) dentata maculata Duda, 1926a : 46.

DESCRIPTION. MALE, FEMALE. Head and eye in profile roundish. Frons either dark brown anteriorly and black posteriorly or dark brown completely; face yellow dorsally and blackish ventrally; gena yellow; subgena and postcranium black; antennal groove blackish. Frons shining; gena subshining; face and antennal groove greyish pruinose; postcranium grey pruinose, only around inner and outer vertical bristles and along eye shining. Gena approximately 3.5 times as broad as first flagellomere in width. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of short setulae. 2 vibrissae. Scape and pedicel brown. First flagellomere dark reddish-grey, only at base reddish, microtomentose, 2-2.5 times as long as wide, with black, bare arista.

Thorax black, mostly shining. Scutum along margin of supra-alar area brownish pruinose and with a stripe of brownish pruinosity between dc lines; scutum along margin of notopleuron area, lower part of proepisternum, proepimeron along ventral margin, and katepisternum along dorsal margin silvery-grey pruinose; scutellum brownish pruinose. Scutum with a row of thin hairs between acr lines, a row of thin hairs along each dc line, and the following paired bristles: 1 postpronotal, 2

notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; katepisternum with several hairs near dorsal margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera sclerotized, forming postcoxal bridge.

Legs yellow, only mid femur with a brown broad ring at apical third, hind femur with two brown rings, mid tibia at base, basal half of hind tibia, and tarsomeres 4 and 5 of all legs brown. Fore coxa with a dorsal bristle near apex; male fore femur and tibia as in Fig. 78-81; mid femur with a short row of thin setulae on anterior surface; mid tibia with an anteroventral bristle in apical third and the following apical bristles: anteroventral, posteroventral, and small dorsal; femur and tibia of hindleg without bristles.

Wing (Fig. 82) clear, with a dark spot near costal vein below apex of R_{2+3} ; basal costal cell dark brown; veins brown. Anal vein long, almost reaching wing margin. Alula narrow. Calypters brownish. Margin of upper calypter yellowish, with long hairs; margin of lower calypter blackish, without hairs. Halter yellow.

Abdomen black, shining, not constricted after tergite 1+2, without strong bristles; tergites 4 and 5 each with a row of marginal setulae; sternites 4 and 5 of male as in Fig. 83. Surstyli symmetrical (Figs. 84,85).

Length of body: 4.2-4.4 mm. Length of wing: 3.5-3.7 mm.

MATERIAL EXAMINED. TYPE. Lectotype (♂) and 2 paralectotypes (♂ and ♀), labelled "Borgmeim, Brasilien" (MNHU). OTHER SPECIMENS. BRASIL, *Sao Paulo*: Sao Paulo, 5.IV. and 25.X.1976 (V.Alin), 1 ♂, 1 ♀ (ZMUM).

RANGE. Brasil.

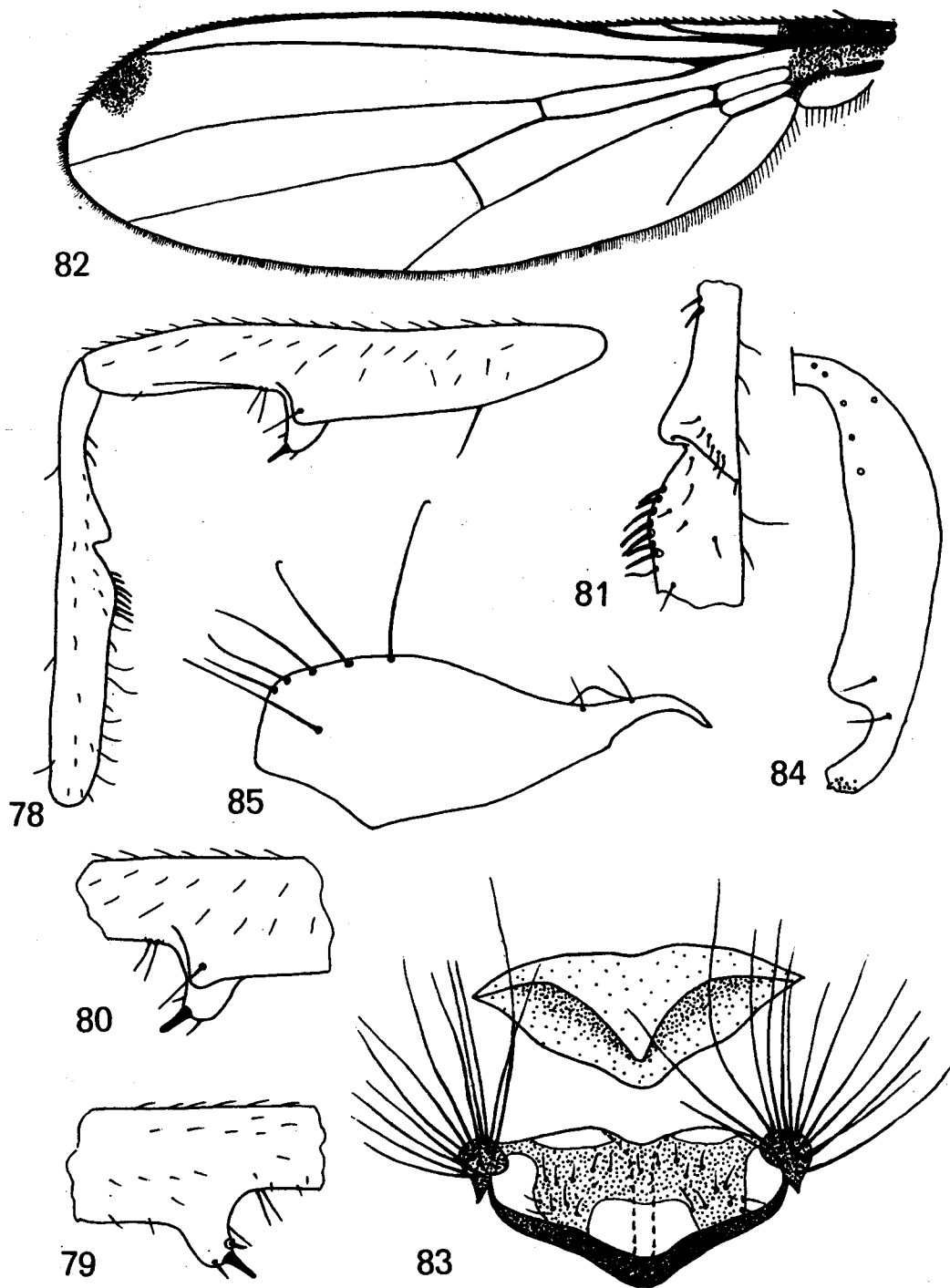
NOTE. The lectotype of *S. (Palaeosepsis) dentata maculata* was designated by Ozerov [1992].

Phalacrosepsis gen.n.

Type-species: *Sepsis armata* Schiner, 1868.

DESCRIPTION. Head in profile roundish. Frons bare. Gena moderate, 2-3 times as broad as width of first flagellomere. Eye in profile roundish or slightly higher than long. Ocellar, postocellar, inner vertical, and outer vertical paired bristles present; orbital bristles absent. Gena with a row of setulae. Occiput without bristles or setulae. One to three pairs of vibrissae. First flagellomere approximately 1.5-2.5 times as long as wide. Arista bare.

Thorax yellow to black. Scutum almost completely shining to brownish pruinose. Lower part of



Figs. 78-85. *Palaeosepsis maculata*, ♂: 78 - fore leg, posterior view; 79 - fragment of fore femur, anterior view; 80 - same, posterior view; 81 - fragment of fore tibia, anterior view; 82 - wing; 83 - abdominal sternites 4 and 5; 84 - epandrium and surstylus, dorsal view; 85 - same, lateral view.

proepisternum, proepimeron along ventral margin, and katepisternum usually along dorsal margin silvery-grey pruinose. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 1-2 postsutural dorsocentrals; postpronotal and acrostichal bristles absent; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous or sclerotized.

Fore femur of male modified, that of female simple or modified. Hind tibia of male without an osmeterium.

Wing either clear completely or darkened along costal vein near wing apex, or with a dark spot at apex. Basal costal cell and basal half of costal cell dark brown, as a rule. Anal vein long, almost reaching wing margin; *bm-cu* crossvein present. Alula broad, entirely covered with microtrichia. Margin of upper calypter with hairs. Margin of lower calypter without hairs.

Abdomen not constricted after tergite 1+2, without strong bristles. Sternite 4 of male oval to ovoid, setose, without lateral lobes; sternite 5 represented by two curved plates. Surstyli symmetrical.

DIAGNOSIS. Resembling *Palaeosepsioides*, but differing by the broad alula and long hairs on the upper calypter.

Key to species of *Phalacrosepsis*

1. Scutum mostly shining 2
- Scutum mostly pruinose 3
2. Posterior half or third of postpronotal lobe shining, as a rule. Scutum usually greyish pruinose between dorsocentral bristles. Male: foreleg, sternites 4 and 5, epandrium, and surstyli as in Figs. 153-156, 158-160 *Ph. pusio* (Schiner)
- Postpronotal lobe with dense silvery-grey pruinosity. Scutum greyish pruinose only before pair of posterior dorsocentral bristles. Male: foreleg, sternites 4 and 5, epandrium, and surstyli as in Figs. 109-112, 114-116 *Ph. ecalcarata* (Thomson)
3. Meron completely pruinose. Hindleg of male and usually of female with strong bristles 4
- Meron with a shining spot. Hindleg of male and female without strong bristles 8
4. Katepisternum silvery-greyish pruinose along entire dorsal margin 5
- Posterior half of katepisternum subshining;

katepisternum pruinose only along dorsal margin anteriorly *Ph. peruana* sp.n.

5. Scutum black, but pleural sclerites reddish-yellow. Fore femur of female ventrally with conic tubercle (Fig. 139). Sternites 4 and 5 of male as in Fig. 141. Epandrium and surstyli as in Figs. 142, 143 *Ph. pleuralis* (Coquillett)
- Thorax completely black or completely reddish-yellow. Fore femur of female simple 6
6. One pair of dorsocentral bristles present (seldom two pairs). Male: foreleg, sternites 4 and 5, epandrium, and surstyli as in Figs. 161-163, 165-167 *Ph. umbriifer* (Schiner)
- Two pairs of dorsocentral bristles 7
7. Apex of wing darkened (Fig. 149). Male: foreleg, sternites 4 and 5, epandrium, and surstyli as in Figs. 144-148, 150-152 *Ph. polychaeta* (Ozerov)
- Wing not darkened at apex. Male: foreleg, sternites 4 and 5, epandrium, and surstyli as in Figs. 94-97, 99-101 *Ph. discolor* (Bigot)
8. Postcoxal bridge present. Basal costal cell and basal half of costal cell clear (Fig. 131). Male: foreleg, sternites 4 and 5, epandrium, and surstyli as in Figs. 126-130, 132-134 *Ph. laticornis* (Duda)
- Postcoxal bridge absent. Basal costal cell and basal half of costal cell dark brown 9
9. Head and thorax reddish-yellow or black. Male: foreleg, sternites 4 and 5, epandrium, and surstyli as in Figs. 86-89, 91-93 *Ph. armata* (Schiner)
- Head and thorax always black. Male: foreleg, sternites 4 and 5, and surstyli different 10
10. Male: foreleg, sternites 4 and 5, epandrium, and surstyli as in Figs. 117-121, 123-125 *Ph. excavata* (Duda)
- Male: foreleg, sternites 4 and 5, epandrium, and surstyli as in Figs. 102-104, 106-108 *Ph. diversiformis* (Ozerov)

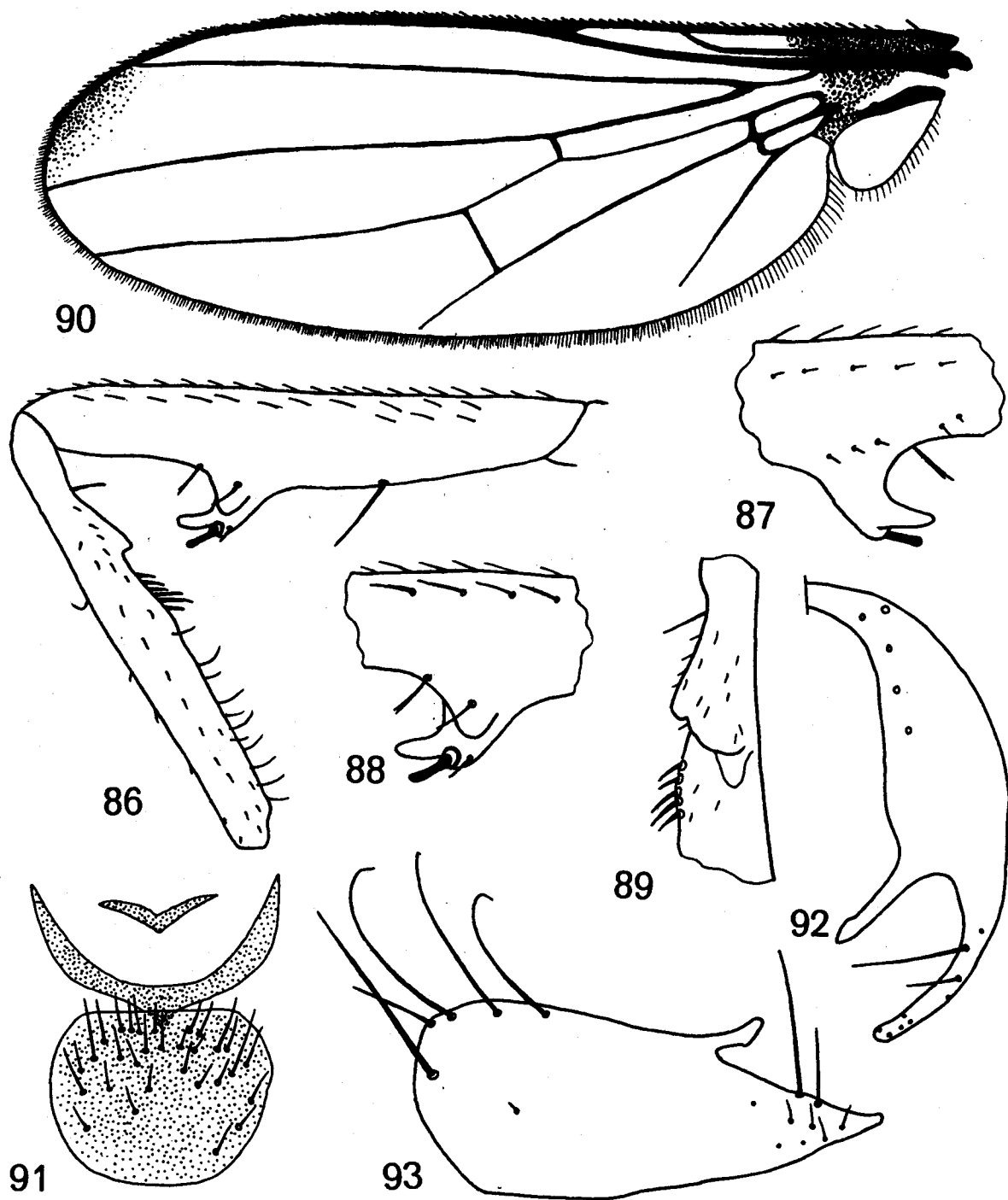
Phalacrosepsis armata (Schiner)

Figs. 86-93.

Sepsis armata Schiner, 1868 : 261.

Sepsis hoplicnema Melander et Spuler, 1917 : 17.

DESCRIPTION. MALE, FEMALE. Head in profile roundish. Frons black but brownish anteriorly; face and gena yellow; antennal groove blackish; subgena and postcranium black. Frons shining; face, antennal groove, and postcranium delicately grey pruinose. Gena approximately 3 times as broad as width of first flagellomere. Eye in profile slightly higher than long. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of short setulae. 2 vibrissae. Antenna reddish-grey or brownish. First flagellomere microtomentose, 2 times as long as wide. Arista black, only at base brownish, bare.



Figs. 86-93. *Phalacrosepsis armata*, ♂: 86 - foreleg, posterior view; 87 - fragment of fore femur, anterior view; 88 - same, posterior view; 89 - fragment of fore tibia, anterior view; 90 - wing; 91 - abdominal sternites 4 and 5; 92 - epandrium and surstylus, dorsal view; 93 - same, lateral view.

Thorax black; scutum and scutellum dark brownish pruinose; proepisternum mostly weakly grey pruinose; proepimeron (except for ventral margin), anepisternum, and katepimeron shining; lower part of proepisternum and proepimeron along ventral margin silvery-grey pruinose; anepimeron shining but narrowly greyish pruinose along posterior margin; katepisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny; meron and metepisternum weakly greyish pruinose, but meron with a shining spot; katatergite and anatergite greyish pruinose; mediotergite shining but greyish pruinose along lateral margins. Scutum with a row of thin and short setulae along each dc and ial line, and usually with a row of thin setulae between acr lines, with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; proepisternum with several short hairs near lower margin; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Legs yellow; mid and hind coxae, fore femur, central part of mid and hind femora (sometimes mid femur completely), basal third of mid tibia, and hind tibia brown to dark brown; tarsomeres 3-5 of foreleg as well as tarsomeres 4 and 5 of midleg and hindleg black. Fore coxa with a posterodorsal bristle near apex; male foreleg modified as in Figs. 86-89; mid femur with a row of short setulae on anterior surface; mid tibia with an anteroventral bristle in apical third and the following apical bristles: anteroventral, posteroventral, anterodorsal, and small dorsal; femur and tibia of hindleg without bristles.

Wing (Fig. 90) with weak brownish tinge, darkened along costal vein below apex of R_{2+3} ; basal costal cell and basal half of costal cell dark brown; veins brown. Anal vein long, almost reaching wing margin. Alula broad. Calypters and their margins white to brownish. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter yellowish.

Abdomen dark brown to black, shining, not constricted after tergite 1+2, without strong bristles; sternites 4 and 5 of male as in Fig. 91. Epandrium and surstyli brown to black; surstyli symmetrical as in Figs. 92, 93.

Length of body: 3.7-6.1 mm. Length of wing: 2.9-4.3 mm.

MATERIAL EXAMINED. TYPE. Holotype of *S. armata*, ♂, labelled "Rio Janeiro, Novara-Reise" (NHMW).

Holotype of *S. hoplicnema*, ♂, labelled "Hayti" and "Type, Sepsis hoplicnema M.-S." (USNM). OTHER SPECIMENS (61 ♂♂, 82 ♀♀, dates and collectors' names omitted). ANTILLES: CUBA, San Carlos Est. (AMNH); HAITI (DOMINICAN REPUBLIC), Parque Los Haitises, 3 km W Cueva de Arena, 20 m, (CMNH), 26 km N Cabo Rojo, 730 m, (CMNH), 23-26 km N Cabo Rojo, 500-700 m (CMNH), 37 km N Cabo Rojo, 4 km E La Abeja 1440 m (CMNH), La Abeja, 38 km NHW Cabo Rojo 1250 m (CMNH), 18 km N. San Jose de Ocoa, 830 m (AMNH); JAMAICA, 1.5 km S Cousins Cove nr. Cousins Cove Cave No. 1, 50 m (USNM); TRINIDAD, Verdant Vale (USNM). ARGENTINA, Salta: Aguaray, (IZML), Urundel, (IZML). BOLIVIA, La Paz: Alto Rio Beni, south of Rio Inicua, 1100m (AMNH). BRASIL, Mato Grosso do Sul: Maracaju (USNM); Rio de Janeiro: Rio de Janeiro (USNM); Sao Paulo: Sao Paulo (ZMUM). COLOMBIA, Antioquia: 18 km E San Jeronimo (USNM). COSTA RICA, Cartago: Cartago (USNM); Heredia: Para Avis, 580 m, (USNM); San Jose: San Antonio de Escazu, 1300 m (USNM). ECUADOR, Chimborazo: Chilicay (USNM); Zamora Chinchipe: Cumaratza (USNM). GUATEMALA, Escuintla: San Jose (USNM); Izabal: Puerto Barrios (USNM), Quirigua (USNM). GUYANA, Essequibo: Kuyuwini R. (AMNH). HONDURAS, Francisco Morazan: Tegucigalpa (AMNH, USNM). MEXICO, Chiapas: El Triunfo, 49 km S Jaraltenango, 1300-2000 m, (USNM). PANAMA, Panama: Barro Colorado Isld. (AMNH, USNM). PERU, Loreto: 12 km N Iquitos (USNM); San Martin: Bellavista, alt. 1500 ft. (AMNH). VENEZUELA, Amazonas: Cerro Unturan Camp, 1100 m (AMNH); Aragua: Portachuelo Pass (USNM).

RANGE. Antilles, Argentina, Brasil, Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Honduras, Mexico, Panama, Peru, Venezuela.

NOTE. The right wing and hindlegs in the holotype of *S. armata* are absent.

Phalacrosepsis discolor (Bigot)

Figs. 94-101.

Sepsis discolor Bigot, 1857 : 823.

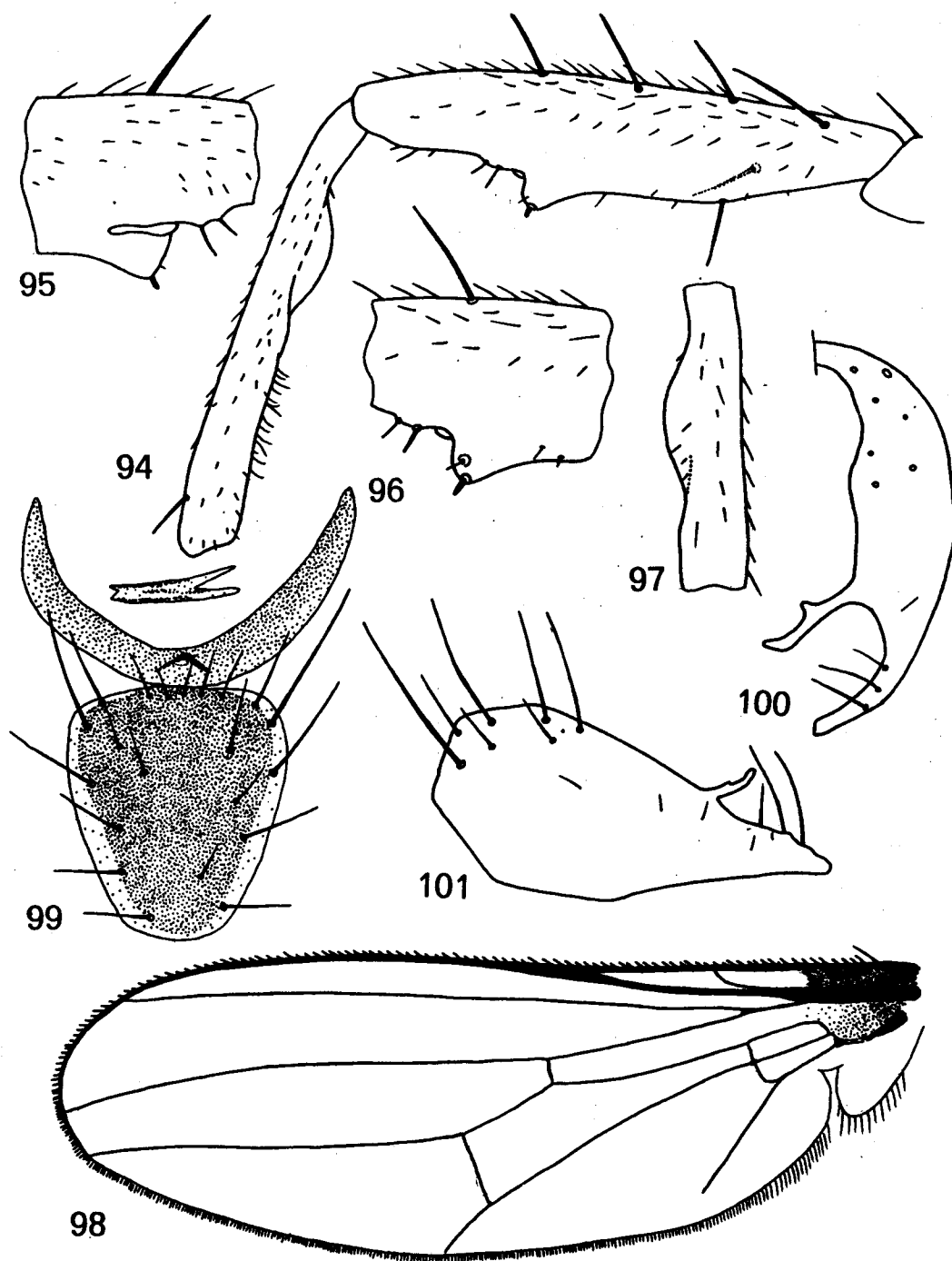
Sepsis scabra Loew, 1861 : 42.

Sepsis haemorrhoidalis Schiner, 1868 : 261.

Sepsis albicoxa Thomson, 1869 : 588 - syn.n.

Sepsis mequignoni Seguy, 1936 : 18.

DESCRIPTION. MALE, FEMALE. Head in profile roundish. Frons black but partly brownish anteriorly or reddish-yellow completely; face and gena yellow; subgena reddish-yellow to black; antennal groove darkened; postcranium reddish-yellow or black. Frons shining; face, gena, subgena, antennal groove, and postcranium greyish pruinose. Gena subequal to half width of first flagellomere. Eye in profile slightly higher than long. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of setulae. 2-3 vibrissae. Antenna reddish-



Figs. 94-101. *Phalacrosepsis discolor*, ♂: 94 - fore leg, posterior view; 95 - fragment of fore femur, anterior view; 96 - same, posterior view; 97 - fragment of fore tibia, anterior view; 98 - wing; 99 - abdominal sternites 4 and 5; 100 - epandrium and surstylus, dorsal view; 101 - same, lateral view.

yellow to reddish-brown. First flagellomere microtomentose, 2 times as long as wide, with a brown to black, bare arista.

Thorax reddish-yellow or black. Scutum brownish pruinose; upper part of proepisternum, proepimeron (except for ventral margin), anepisternum, anepimeron, and katapimeron shining; sometimes upper part of proepisternum weakly greyish pruinose; lower part of proepisternum and proepimeron along ventral margin silvery-grey pruinose; katapisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny; meron, metepisternum, katatergite, and anatergite greyish pruinose; mediotergite subshining but greyish pruinose along lateral margins; scutellum dark brown pruinose. Scutum with a row of thin setulae along each *dc* and *ial* line and a row of thin setulae between *acr* lines (in female, setulae thinner and shorter than in male), with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; postpronotal lobe with several long hairs; proepisternum with several hairs and a bristle near lower margin; male proepimeron with 1-2 hairs and a bristle anteriorly, in female with hairs only; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; katapisternum with a row of thin setulae near dorsal margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Fore coxa and tibia, base of mid and hind femora, sometimes apical quarter of hind femur (usually dorsal, anterodorsal, and posterodorsal surfaces), apical quarter to third of mid tibia, tarsomeres 1 and 2 of foreleg (rarely first tarsomere only) as well as tarsomeres 1 and 2 or 1-3 of midleg and hindleg yellow; other parts of legs dark brown to black. In male: fore coxa with a strong dorsal bristle near apex and several dorsal setulae; foreleg modified as in Figs. 94-97; mid femur with a row of setulae on anterior surface, with 1 posterodorsal bristle in apical quarter, and sometimes with 1 anteroventral and 1 posteroventral bristles at middle; mid tibia with 1-2 anterodorsal bristles, 1 ventral bristle in apical third, 1 posterodorsal bristle near middle, and apical bristles: posteroventral, ventral, and anteroventral; hind femur with 1-3 dorsal, 3-5 anterodorsal, and 2-3 posterodorsal bristles at apical half, with 1-2 ventral bristles at middle; hind tibia with 1 preapical dorsal bristle, 1 anterodorsal and 1 posterodorsal bristles near middle, and 1-2 strong anteroventral apical bristles. In female: fore coxa with a posteroventral bristle near apex; fore femur and tibia simple, without strong bristles; mid femur with

a row of thin short bristles on anterior surface and with a strong posterodorsal bristle in apical quarter; mid tibia with a strong ventral bristle in apical third, a strong dorsal preapical bristle, and the following apical bristles: anteroventral, posteroventral, and posterior; hind femur with 1-2 anterodorsal and 1-2 posterodorsal thin bristles apically; hind tibia with 1 strong posterodorsal bristle near the middle, 1 preapical dorsal and 1 strong anterior apical bristles.

Wing (Fig. 98) clear, only basal costal cell and basal half of costal cell dark brown; veins yellowish to brown. Anal vein long, almost reaching wing margin. Alula broad. Calypters and their margins whitish or yellowish. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter yellowish.

Abdomen dark brown to black, subshining, not constricted after tergite 1+2; tergites 4 and 5 of male each with a row of thin marginal bristles; tergites of female without bristles; sternites 4 and 5 of male as in Fig. 99. Epandrium and surstyli yellow to brown; surstyli symmetrical as in Figs. 100, 101.

Length of body: 3.9-6.2 mm. Length of wing: 3.0-5.0 mm.

MATERIAL EXAMINED. TYPE. Holotype of *S. haemorrhoidalis*, ♂, labelled "Rio Janeiro, Novara-Reise" (NHMW); lectotype of *S. albicoxa*, ♂, labelled "Brasil, Kinb" and paralectotype of *S. albicoxa*, ♀, labelled "Rio Jan., Kinb", both specimens from SMNH; holotype of *S. meguignoni*, ♂, labelled "Acores, San Miguel, Sete Cidades, L. Chopard, aout., 1930" (MNHN). OTHER SPECIMENS (380 ♂♂, 400 ♀♀, dates and collectors' names omitted). ANTILLES: CUBA, Aguada, (AMNH), Banes (AMNH), Soledad (USNM), Lomas de Camoa (USNM), La Palma (USNM); DOMINICA, Casse (USNM), Clarke Hall (USNM), Dublanc (USNM), Laudet (AMNH), Portsmouth, 0-100 m (AMNH, USNM), Roseau, 0-100 m (AMNH, USNM, ZMC), Springfield Plantation (USNM); GUADELOUPE, Pointe-a-Pitre (AMNH); GRENADA (USNM); HAITI (DOMINICAN REPUBLIC), San Lorenzo (AMNH), Parque Los Haitises, E of Trepada Alta, 12 km W El Valle (CMNH), Parque Los Haitises, 3 km W Cueva de Arena, 20 m (CMNH), 9.5 km W El Valle, 170 m (CMNH), Sierra de Neiba just south of crest, 5 km NNW Angel Feliz, 1780 m (CMNH), 7 km NNE Boca de Chavon, at Rio Chavon, 20 m (CMNH), 10 km S Constanza (USNM), 23-26 km N Cabo Rojo 500-700 m (CMNH), 26 km N Cabo Rojo, 730 m (CMNH), 23.5 km N Cabo Rojo, 540 m, (CMNH); La Abeja, 38 km NHW Cabo Rojo, 1250 m, (CMNH), 18 km N. San Jose de Ocoa, 830 m, (AMNH); HAITI (HAITI), Limbe, Good Samaritan Hospital (USNM); JAMAICA, Baron Hill (AMNH), Hope Hardens (AMNH), Mandeville, Manchester, about 2250 ft (AMNH), Pt. Antonio (USNM), Hardwar Gap (USNM); PUERTO RICO, Adjuntas (AMNH), Aguas Buenas (USNM), Aibonito (AMNH), Arecibo (AMNH); Arecibo, Cambalache For. (USNM),

Barranquitas (USNM), Bayamon (USNM), Cayey (USNM), Corozal (USNM), Ensenada Honda (USNM), Henry Bks. (USNM), Isabela (USNM), Luquillo Natl. For., El Verde (USNM), Naguabo (AMNH); Fortuna Agr. Exp. Sta. (USNM); TRINIDAD, Verdant Vale (USNM), Hillsborough Dam (USNM), San Fernando (USNM). ARGENTINA, *Alto Parana*: Curitiba (USNM); *Chaco*: Colonia Benitez (IZML); *Corrientes*: Santo Tome (IZML), Manantiales (IZML); *Formosa*: Pirane (IZML); *Misiones*: Iguazu Falls (USNM), Panambi (IZML), Posadas (USNM), Santa Ana (IZML); *Salta*: Aguaray (IZML). BELIZE, *Corozal*: Corozal (USNM). BOLIVIA, *Beni*: El Porvenir Stn. NE of San Borja, (USNM), Rurrenabaque (USNM); *La Paz*: Tumupasa (USNM). BRASIL, *Babia*: Piraja (USNM); *Ceara*: Fortaleza (USNM); *Mato Grosso do Sul*: Maracaju (USNM); *Minas Gerais*: Sabara (USNM); *Para*: Alcobaca, R. Tocantins (USNM), Belem, Museu Goeldi (AMNH), Para (USNM); *Parana*: Curitiba (USNM); *Rio Grande do Sul*: Pelotas (AMNH, USNM); *Rio de Janeiro*: Petropolis (USNM), Rio de Janeiro (AMNH, USNM); *Sao Paulo*: Santos (USNM), Sao Paulo (AMNH, USNM, ZMUM), Sao Vicente (USNM). COLOMBIA, *Cundinamarca*: Sasaima, 1800 m (USNM). COSTA RICA, *Cartago*: Cartago (AMNH, USNM), Turrialba (USNM); *San Jose*: San Isidro, 7-800 m (ZMC), San Jose (USNM). EL SALVADOR, *La Libertad*: La Libertad, 0-20 m (AMNH); *San Salvador*: San Salvador (USNM). ECUADOR, *Chimborazo*: Bugna, (USNM), Chilicay, (USNM); *Guayas*: Balao (USNM); *Napo*: 12 km SW Tena (USNM); *Pastaza*: Puyo (USNM); *Tungurahua*: Banos, 6200 (USNM); *Zamora Chiriqui*: Cumaratza (USNM), Zumbi (USNM). GUATEMALA, *Alta Verapaz*: Coban (AMNH); *Chimaltenango*: Yepocapa (USNM); *Guatemala*: Amatitlan, 4000 ft, (AMNH); Guatemala City (USNM); *Izabal*: Puerto Barrios (USNM); Quirigua (USNM); *Peten*: Santa Elena, 120-160 m (AMNH); *Saca Tepequez*: Antigua, 5000 ft. (AMNH), Antigua (USNM). GUYANA, *Essequibo*: Bartica (AMNH), Kaieteur (AMNH), Kartabo (AMNH), Tukeit, (AMNH). HONDURAS, *Atlantida*: La Ceiba (AMNH); *Francisco Morazan*: Tegucigalpa (AMNH, USNM), Zambrano, nr. Tegucigalpa, Los Lago (USNM); *Yoro*: Morazan, (USNM). MEXICO, *Campeche*: Champaton (USNM); *Guerrero*: Taxco (USNM); *Hidalgo*: 2 mi SW Jacala (USNM); *Jalisco*: Tlaquepaque (USNM); *Michoacan*: San Jose Purua (USNM); Uruapan (USNM); *Morelos*: Cuautla (AMNH, USNM), Cuernavaca, 1500-1600 m (AMNH, USNM); *Nayarit*: Tepic (USNM); *Veracruz*: Cordoba (USNM), Jalapa (USNM), Orizaba (USNM), Salto de Eypantla, (USNM). NICARAGUA, Santa Maria de Ostuma (USNM). PANAMA, *Chiriqui*: 2.6 km S Guabala on Rio Jacube, 5 m, (USNM), El Volcan (USNM). PARAGUAY, *Central*: Asuncion (USNM); *Cordillera*: Caacupe (USNM); *Guaira*: Villarrica (USNM). PERU, *Cuzco*: Machu Picchu (AMNH), Pueblo, Machu Picchu, 2040 m (USNM); *Huanuco*: Acomayo, 20 km N Huanuco (USNM), Cochicote (USNM), Tingo Maria, alt. 2200 ft. (AMNH); 1 km S Tingo Maria (USNM); *Juni*: Perene (USNM); *Lima*: Lima (USNM); *Loreto*: Iquitos (USNM), San Antonio (USNM). SURINAME, Paramaribo (USNM). VENEZUELA, *Aragua*: Portachuelo Pass (USNM); *Bari-*

nas: Barinitas (USNM); *Carabobo*: Valle Seco (USNM); *Merida*: Tovar (USNM); *Zulia*: El Tucuco, 45 km SW of Machiques (USNM).

RANGE. Antilles, Argentina, Belize, Bolivia, Brasil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Venezuela.

NOTE. The lectotype of *S.albicoxa* was designated by Ozerov [1992]. The head, left midleg, left hindleg, and abdomen in the lectotype are lost.

The type material of *S.discolor* was not discovered in any museums.

The holotype of *S.scabra* is preserved in The Museum of Comparative Zoology, Harvard University, USA, not examined.

The following notes of Melander and Spuler [1917] about *S.discolor* and *S.scabra*, which they considered to be identical, are interesting: "This insular species was described independently by both Bigot and Loew from Cuban material. Von Roeder reported it from Porto Rico. The preceding description was made from specimens furnished by Mr. C.W.Johnson from Cuba and Jamaica".

The record of *S.discolor* in the Azores may be the result of its introduction [Ozerov, 1993].

Phalacrosepsis diversiformis (Ozerov)

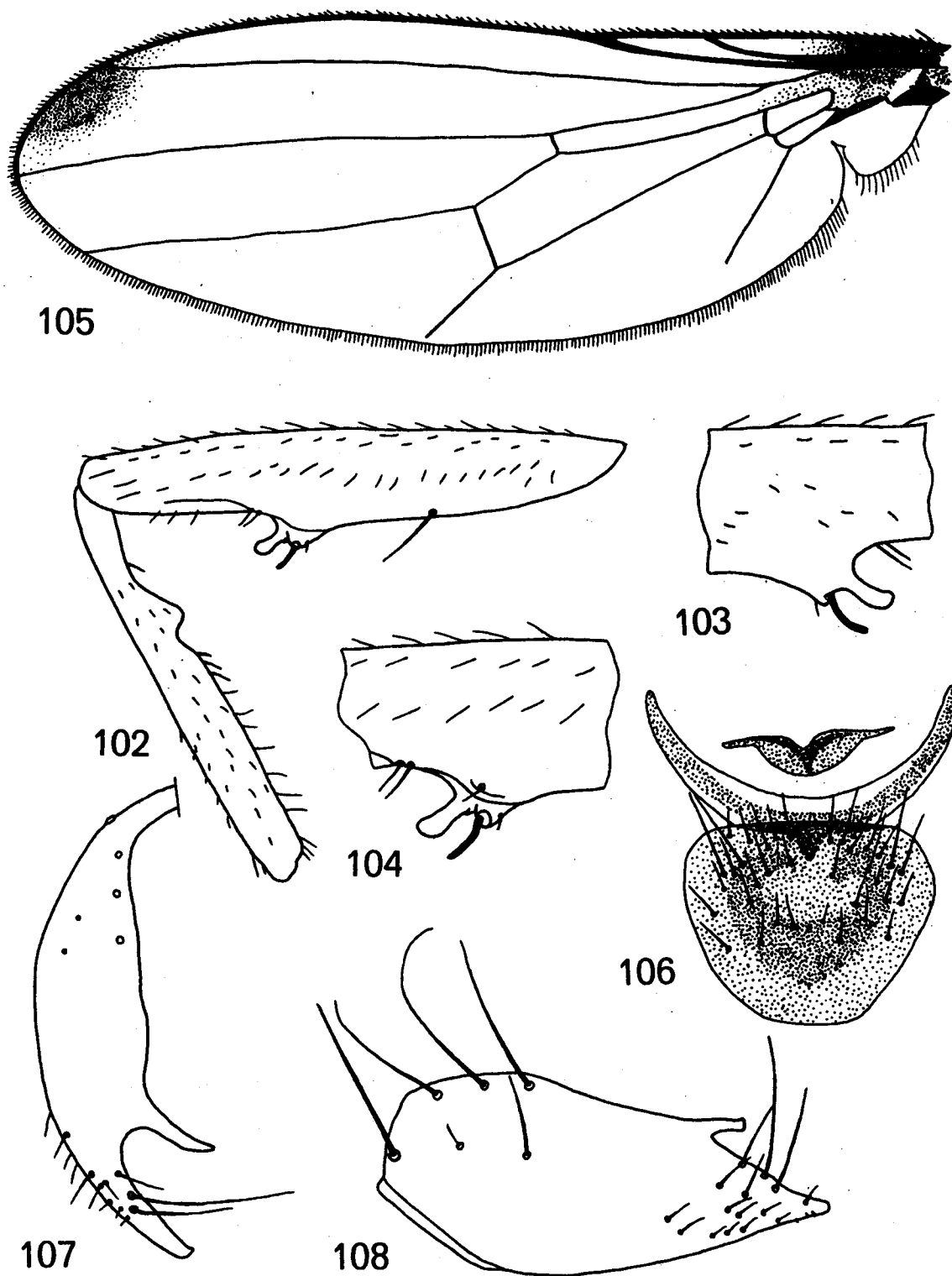
Figs. 102-108.

Palaeosepsis diversiformis Ozerov, 1993 : 65.

DIAGNOSTIC DESCRIPTION. MALE, FEMALE. Thorax black. Scutum brownish pruinose; meron greyish pruinose but with a big shining spot. Two pairs of postsutural dorsocentral bristles present. Posteroventral area of thorax behind and above hind coxae between metepimera membranous. Male foreleg modified as in Figs. 102-104; femur and tibia of hindleg without bristles. Wing (Fig. 105) with weak brownish tinge, darkened along costal vein below apex of R_{2+3} ; basal costal cell and basal half of costal cell dark brown. Sternites 4 and 5 of male as in Fig. 106. Surstyli symmetrical as in Figs. 107, 108.

Length of body: 3.8-5.6 mm. Length of wing: 3.1-4.2 mm.

MATERIAL EXAMINED. TYPE. Holotype, ♂, "Costa Rica: Puntarenas, Monta Verde, ca. 1500 m, 4-11.II.1989, D.Grimaldi; lower montane wet forest" (AMNH); paratypes: 2 ♂♂, same data as in holotype (AMNH, ZMUM), ♀, "Cartago, IX.1958, N.L.H.Krauss" (AMNH), 4 ♂♂, 2 ♀♀, "Argentina, Salta: Rosario de la Frontera, Los Banos, 9-10.IV.1979, Mision Cientifica Danesa" (ZMC, ZMUM). OTHER SPECIMENS. ARGENTINA, *Tucuman*: Queb. Cainzo, 18-19.XI.1950 (R.Golbach), 1 ♂ (IZML); V. Padre Monti, 17.I-7.II.1948 (R.Golbach), 3 ♂♂, 3 ♀♀ (IZML). COSTA RICA, *Puntarenas*: Monte Verde, 26.III.1987 (W.E.Steiner), 1 ♂ (USNM). MEXICO,



Figs. 102-108. *Phalacrosepsis diversiformis*, ♂: 102 - foreleg, posterior view; 103 - fragment of fore femur, anterior view; 104 - same, posterior view; 105 - wing; 106 - abdominal sternites 4 and 5; 107 - epandrium and surstylus, dorsal view; 108 - same, lateral view.

Michoacan: Uruapan, X.1954 (N.L.H.Krauss), 1 ♂ (USNM). PANAMA, *Chiriqui*: Potrerillos, 27.IV.1934 (D.V.Brown), 1 ♂, 1 ♀ (USNM); *Panama*: Barro Colorado Isld., 17.VI.1978 (Silberglied & Aiello), 1 ♂, 1 ♀ (USNM). PERU, *Loreto*: Iquitos, III-IV.1931 (R.C.Shannon), 1 ♂ (USNM).

RANGE. Argentina, Costa Rica, Mexico, Panama, Peru.

Phalacrosepsis ecalcarata (Thomson)

Figs. 109-116.

Sepsis ecalcarata Thomson, 1869 : 588.

Nemopoda cubensis Bigot, 1886 : 390 - syn.n.

Nemopoda xanthostoma Bigot, 1886 : 391 - syn.n.

Sepsis insularis Williston, 1896 : 431 - syn.n.

Sepsis bilobata Becker, 1919 : 206 - syn.n.

DESCRIPTION. MALE, FEMALE. Head and eye in profile roundish. Frons black but brown anteriorly; face, gena, subgena, and antennal groove yellow; postcranium black. Frons shining; face, gena, antennal groove, and postcranium greyish pruinose. Gena subequal to half width of first flagellomere. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of setulae. 1 vibrissa. Antenna reddish-yellow, slightly darkened along anterior margin. First flagellomere microtomentose, approximately 1.5 times as long as wide, with dark brown, bare arista.

Thorax black. Scutum shining, only postpronotal lobe, lower part of notopleuron, and surface between posterior dorsocentral bristles and scutellum brownish pruinose; upper part of proepisternum, meron, metepisternum, katatergite, and anatergite greyish pruinose; proepimeron (except for ventral margin), anepisternum, anepimeron, and katepimeron shining; lower part of proepisternum and proepimeron along ventral margin silvery-grey pruinose; katepisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny; mediotergite shining but greyish pruinose along lateral margins. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; proepisternum with several thin and short hairs near lower margin; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Legs yellow, only mid and hind femora as well as mid tibia slightly darkened, hind tibia often brown, and tarsomeres 2-5 of foreleg as well as tarsomeres 3-5 of midleg and hindleg black. Fore coxa with a

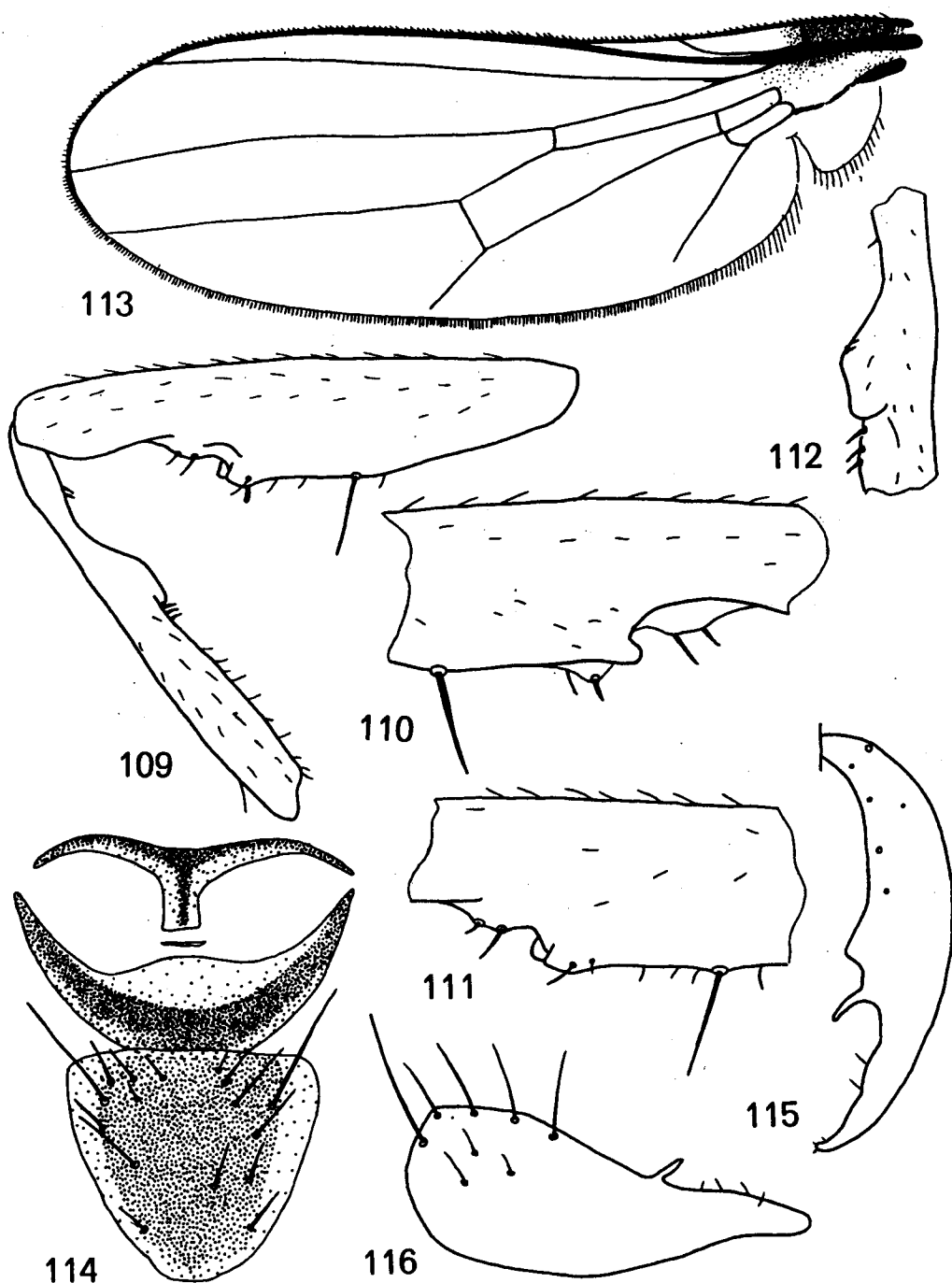
dorsal bristle near apex; male foreleg modified as in Figs. 109-112; mid femur with a row of short setulae on anterior surface; mid tibia with an anteroventral bristle in apical third and the following apical bristles: anteroventral, posteroventral, and antero-dorsal; femur and tibia of hindleg without bristles.

Wing (Fig. 113) clear, only basal costal cell and basal half of costal cell dark brown; veins brownish. Anal vein long, almost reaching wing margin. Alula broad. Calypters and their margins whitish to greyish. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter white.

Abdomen black, shining, not constricted after tergite 1+2; tergites 3-5 of male and usually tergites 4 and 5 of female each with a row of thin marginal bristles; sternites 4 and 5 of male as in Fig. 114. Epandrium and surstyli brown to black; surstyli symmetrical as in Figs. 115, 116.

Length of body: 3.0-4.7 mm. Length of wing: 2.3-3.4 mm.

MATERIAL EXAMINED. TYPE. Lectotype of *S. ecalcarata*, ♀, with three labels "California", "Knib" and "typus" (SMNH); lectotype of *N. cubensis*, ♂, without geographic label (HECO); lectotype and paralectotype (both ♀♀) of *N. xanthostoma*, labelled "Buenos-Ayres" (HECO); lectotype of *S. insularis*, ♂, labelled "St. Vincent, W.I., South end, H.H. Smith" and "W. Indies, 1907-66" (BMNH); holotype of *S. bilobata*, ♂, labelled "Equateur: Cuenca, alt.: 2532 m; Rivet, 1905" (MNHN). OTHER SPECIMENS (326 ♂♂, 475 ♀♀, dates and collectors' names omitted). ANTILLES: CUBA, Zaza d. Media (AMNH), Cabanas (AMNH), 7 km N of Vinales (AMNH), Herradura (AMNH), Soledad (USNM), San Carlos Est. (AMNH), Havana (AMNH), Lomas de Camoa (USNM), Guane (AMNH), S. Julian, 5 mi S Guane (USNM), Santiago de Cuba (AMNH); DOMINICA, Laudet (AMNH), Portsmouth, 0-100 m (AMNH, ZMC), Roseau (AMNH); GRENADA, St. Georges, 0-200 m (AMNH), Pt. Saline (USNM); GRENADINES, Bequia, Port Elizabeth (USNM); GUADELOUPE, Point a Pitre (AMNH); HAITI (DOMINICAN REPUBLIC), Ciudad Trujillo (= Santo Domingo) (USNM), 6 km W of Ciudad Trujillo (= Santo Domingo) (USNM), 6 km NW Paraiso, Rio Nizao, 170 m (CMNH), 9.5 km W El Valle, 170 m (CMNH), Hato Mayor (USNM), 7 km NNE Boca de Chavon, at Rio Chavon 20 m (CMNH), Paso de la Vaca, Mons. Nouel-Constanza Rd. (USNM), La Abeja, 38 km NHW Cabo Rojo, 1250 m, (CMNH); MARTINIQUE, Fort-de-France (AMNH); PUERTO RICO, Albonito (AMNH), Arecibo (AMNH), Aguadilla (USNM), Aguas Buenas (USNM), Bayamon (USNM), Caguas (AMNH), Cartagena Lagoon (USNM), Cayey (AMNH), Coamo Springs (AMNH), Corozal (USNM), Fajardo (USNM), Isabela (USNM), Jayuya (AMNH), Mameyes (AMNH), Manati (AMNH), Mayaguez (AMNH, USNM), Fortuna Agr. Exp. Sta. (USNM), Rio Pedros (USNM), San Juan (AMNH, ZMC), Utuado (USNM), Vieques Isl. (USNM);



Figs. 109-116. *Phalacrosepsis ecalcarata*, ♂: 109 - foreleg, posterior view; 110 - fragment of fore femur, anterior view; 111 - same, posterior view; 112 - fragment of fore tibia, anterior view; 113 - wing; 114 - abdominal sternites 4 and 5; 115 - epandrium and surstylus, dorsal view; 116 - same, lateral view.

ST. KITTS, Basseterre (ZMC); ST. LUCIA, Lucilia Castries (AMNH, USNM). ST. VINCENT, Kingstown, 0-200 m (AMNH, USNM); TRINIDAD, Friendship Estate (USNM); VIRGIN ISLANDS, St. Thomas, Charlotte Amalie (AMNH), St. Croix, Christiansted (AMNH). ARGENTINA, Buenos Aires: La Alborada, Los Cardales 60 km NW Buenos Aires (ZMC); Chaco: Colonia Benitez (IZML); Jujuy: Palpala (IZML). Mendoza: Uspallata, 1150 m (IZML); Misiones: Bemberg (IZML), Iguazu (IZML, USNM); Salta: Embarcacion (IZML), Molinos (IZML), Ruiz de los Llanos (IZML), Urundel (IZML); Santa Fe: La Gallareta (IZML); Tucuman: Aconquija (IZML), La Madrid (IZML), Lacavera (IZML), Trancas (IZML), V. Padre Monti (IZML). BELIZE, Corozal: Corozal (USNM). BOLIVIA, Cochabamba: Pena Colorada, 1800 m (AMNH). BRASIL, Ceara: Fortaleza (USNM); Para: Belem, Ipean (AMNH); Sao Paulo: Sao Paulo (AMNH). COLOMBIA, Tolimo: Armero (USNM). COSTA RICA, Guanacaste: Playa Tamarindo (USNM); Heredia: Finca La Selva, nr. Puerto Viejo, (USNM); Puntarenas: Dominical (USNM); San Jose: San Antonio de Escazu, 1300 m (USNM); San Jose, 11-1200 m (ZMC). EL SALVADOR, Sonsonate: Izalco (USNM). GUATEMALA, Guatemala: Amatitlan, 4000 ft (AMNH), Guatemala City (USNM); Santa Rosa: 23 mi E of Taxisco (USNM). GUYANA, Essequibo: Kuyuwini R. (AMNH). HONDURAS, Francisco Morazan: El Zamorano (AMNH), Tegucigalpa (AMNH, USNM), Zambrano, nr. Tegucigalpa, Los Lago (USNM). MEXICO, Chiapas: Porto Madero (USNM); Colima: Armeria (AMNH); Jalisco: Tlaquepaque (USNM); Michoacan: Uruapan, 1600-1700 m (AMNH, USNM); Morelos: Cuernavaca (AMNH, USNM); Nayarit: Tepic (USNM); Oaxaca: Oaxaca (USNM), Tehuantepec (USNM); Sonora: 10 Mi W Alamos (AMNH); Veracruz: Veracruz (USNM); Yucatan: Merida (USNM). NICARAGUA, Chinandega: Chinandega (USNM); Zelaya: Puerto Cabezas (USNM). PANAMA, Chiriqui: 3.5 km W Puerto Vidal, Rio Tabasara 10 m (USNM); Panama: Arraijan (USNM), Barro Colorado Isld. (AMNH), Bella Vista (USNM). PARAGUAY, Amambay: Parq. Nac. Cerro Cora (USNM); Central: 20 mi E of Asuncion (USNM); Guaira: Villarrica (USNM); Itapua: San Pedro to Yuty (Caazapa) (AMNH); Parana: SW Saltos del Guaira (AMNH). PERU, Lima: Lima (USNM). UNITED STATES, Florida: Fort Lauderdale (USNM), Fort Myers (USNM), Jupiter (USNM), Miami (ZMUM), Opa-locka (USNM), Orlando (USNM); Texas: Dallas (USNM). VENEZUELA, Aragua: 2 km N Ocumare de la Costa (USNM), Pueto de Cata (USNM); Guarico: Hato Masaguaral, 44 km S Calabozo (USNM); Lara: 20 km E Carora (USNM); Monagas: Caripito (AMNH); Zulia: 6 km W La Concepcion (USNM), Carrasquero (USNM), Rosario (USNM).

RANGE. Antilles, Argentina, Belize, Bolivia, Brasil, Colombia, Costa Rica, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, United States, Venezuela.

NOTE. The lectotypes of *S. ecalcarata*, *N. cubensis*, *N. xanthostoma*, and *S. insularis* were designated by Ozerov [1992].

Phalacrosepsis excavata (Duda)

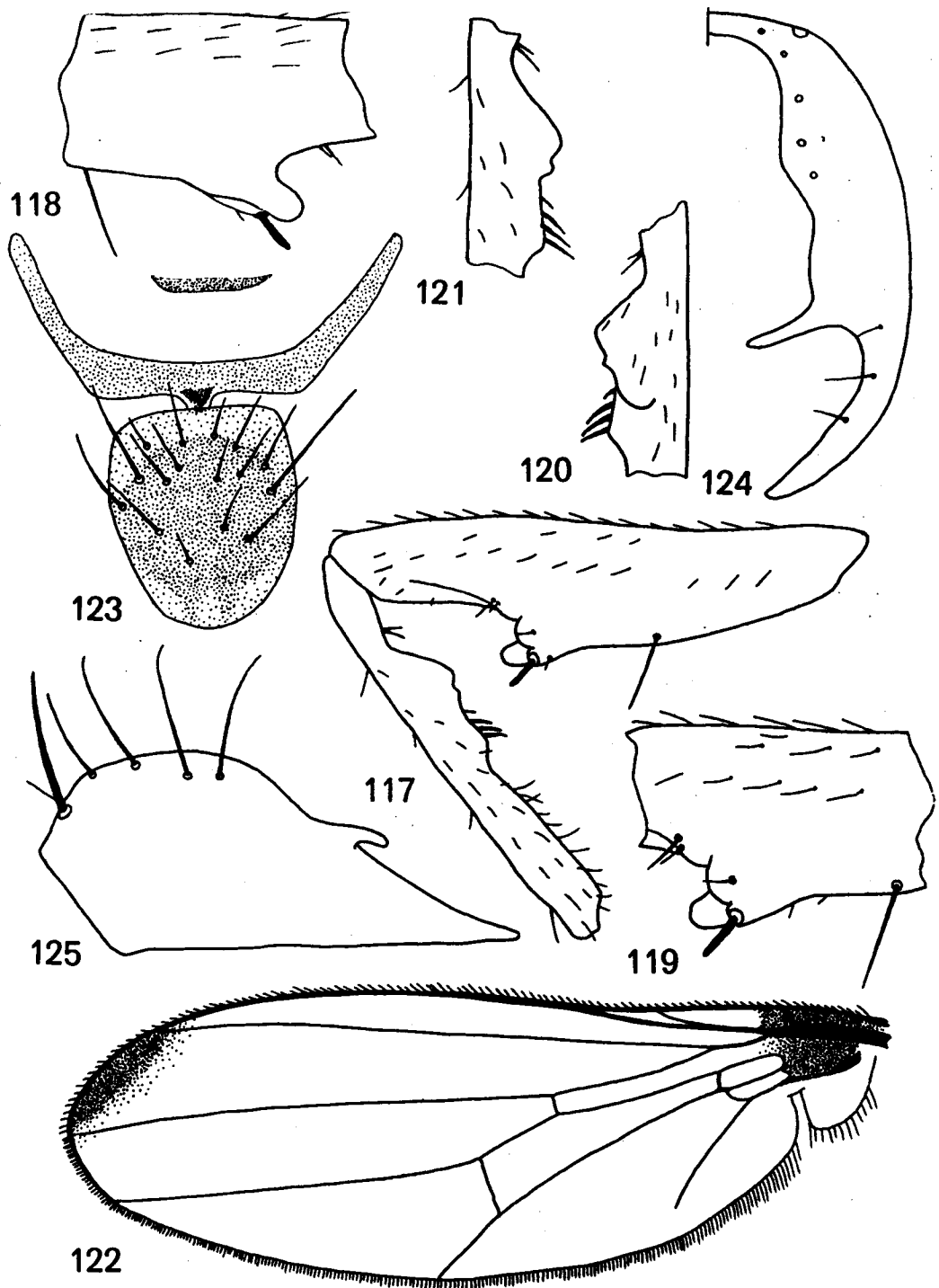
Figs. 117-125.

Sepsis incisa Becker, 1919 : 206 (preocc. Strobl, 1894 : 106). *Sepsis (Palaeosepsis) excavata* Duda, 1926b : 87 (new name for *Sepsis incisa* Becker, 1919).

DESCRIPTION. MALE, FEMALE. Head in profile roundish. Frons black but brownish anteriorly; face yellow to blackish; gena yellow; antennal groove blackish; subgena and postcranium black. Frons shining; face, antennal groove, and postcranium delicately grey pruinose. Gena approximately 3 times as broad as width of first flagellomere. Eye in profile slightly higher than long. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of short setulae. 2 vibrissae. Antenna reddish-black to greyish-black. First flagellomere microtomentose, 2 times as long as wide. Arista black, only at base brownish, bare.

Thorax black. Scutum and scutellum brownish pruinose; proepisternum mostly weakly grey pruinose; proepimeron (except for ventral margin), anepisternum, and katapimeron shining; anepimeron shining but narrowly greyish pruinose along posterior margin; lower part of proepisternum and proepimeron along ventral margin silvery-grey pruinose; katapisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny; meron and metepisternum weakly greyish pruinose, but meron with a big shining spot; katatergite, and anatergite greyish pruinose; mediotergite shining but greyish pruinose along lateral margins. Scutum with a row of thin and short setulae along each dc and ial line, with a row of thin setulae between acr lines, and with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; proepisternum with several short hairs near lower margin; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Legs yellow; mid and hind coxae, fore femur, central part of mid and hind femora (sometimes mid femur completely), basal third or basal half of mid tibia, and hind tibia brown to dark brown; tarsomeres 3-5 of foreleg as well as tarsomeres 4 and 5 of midleg and hindleg black. Fore coxa with a dorsal bristle near apex; male foreleg modified as in Figs. 117-120; mid femur with a row of short setulae on anterior surface; mid tibia with an anteroventral bristle in apical third and the following apical



Figs. 117-125. *Phalacroseps excavata*, ♂: 117 - foreleg, posterior view; 118 - fragment of fore femur, anterior view; 119 - same, posterior view; 120 - fragment of fore tibia, anterior view; 121 - same, posterior view; 122 - wing; 123 - abdominal sternites 4 and 5; 124 - epandrium and surstylus, dorsal view; 125 - same, lateral view.

bristles: anteroventral, posteroventral, anterodorsal, and small dorsal; femur and tibia of hindleg without bristles.

Wing (Fig. 122) with weak brownish tinge, slightly darkened or with a dark brown spot near costal vein below apex of R_{2+3} ; basal costal cell and basal half of costal cell dark brown; veins brown. Anal vein long, almost reaching wing margin. Alula broad. Calypters and their margins whitish. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter yellowish.

Abdomen dark brown to black, shining, not constricted after tergite 1+2, without strong bristles; sternites 4 and 5 of male as in Fig. 123. Epandrium and surstyli brown to black; surstyli symmetrical as in Figs. 124, 125.

Length of body: 3.0-5.9 mm. Length of wing: 2.0-4.2 mm.

MATERIAL EXAMINED. TYPE. Lectotype (♂) and paralectotype (♀) of *S. incisa*, labelled "Equateur: Cuenca, alt.: 2532 m; Rivet, 1905" (MNHN). OTHER SPECIMENS. BELIZE, 17.III.1940 (Komp), 1 ♂ (USNM). BRASIL, *Babia*: Piraja, 8.X.1929 (Shannon), 1 ♂ (USNM). COSTA RICA, province?: "Higuito, San Mateo", (P.Schild), 1 ♂ (USNM); *Heredia*: 12 km SW Horquetas, (Para Avis), 550 m., 18-23.I.1989 (A.Grimaldi), 1 ♂ (AMNH). GUATEMALA, *Izabal*: Puerto Barrios, 1943 (D.G.Hall), 1 ♂ (USNM). GUYANA, *Essequibo*: Kaieteur, 30.VII-12.VIII.1911, 9 ♂♂, 1 ♀ (AMNH); Kartabo, 11.V.1924, 2 ♂♂ (AMNH); Kuyuwini R., 22.XI.1932 (W.G.Hassler), 2 ♂♂ (AMNH); Tukeit, 21.VII.1911, 4 ♂♂ (AMNH). PANAMA, *Panama*: Barro Colorado Isld., 8.VII.1923 (R.C.Shannon), 1 ♂ (USNM); Barro Colorado Isld., 9.I.1929 (C.H.Curran), 1 ♂ (AMNH); Barro Colo. Nat. Monm., 20.II-13.III.1985 (D.A.Grimaldi), 3 ♂♂, 1 ♀ (AMNH). PERU, *Huanuco*: Acomayo (20 km N Huanuco), 5.II.1984 (W.N.Mathis), 1 ♀ (USNM); *Loreto*: San Antonio, 18.VIII.1965 (J.C.Hitchcock), 1 ♂ (USNM). VENEZUELA, "San Esteban", XII.1939 (P.J.Anduze), 1 ♂ (USNM).

RANGE. Belize, Brasil, Costa Rica, Guatemala, Guyana, Panama, Peru, Venezuela.

NOTE. The lectotype of *S. incisa* was designated by Ozerov [1992].

Phalacrosepsis laticornis (Duda)
Figs. 126-134.

Palaeosepsis laticornis Duda, 1926a : 45.

DESCRIPTION. MALE, FEMALE. Head in profile roundish. Frons, antennal groove, subgena, and postcranium black; upper half of face yellow, lower portion black; gena black, with yellowish anterior quarter or third. Frons shining; face, gena, antennal groove, and postcranium greyish pruinose. Gena approximately 3 times as broad as first flagellomere in width. Eye in profile slightly higher than long.

Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of short setulae. 1-2 vibrissae. Antenna reddish-black. First flagellomere microtomentose, 2 times as long as wide. Arista black, only at base brownish, bare.

Thorax black. Scutum and scutellum brownish pruinose; upper part of proepisternum, meron, katatergite, and anatergite grey pruinose; upper part of proepimeron, anepisternum, anepimeron, and katepimeron shining; lower part of proepisternum and proepimeron along ventral margin silvery-grey pruinose; katepisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny; mediotergite shining but greyish pruinose along lateral margins. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; proepisternum with several short hairs near lower margin; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera sclerotized, forming postcoxal bridge.

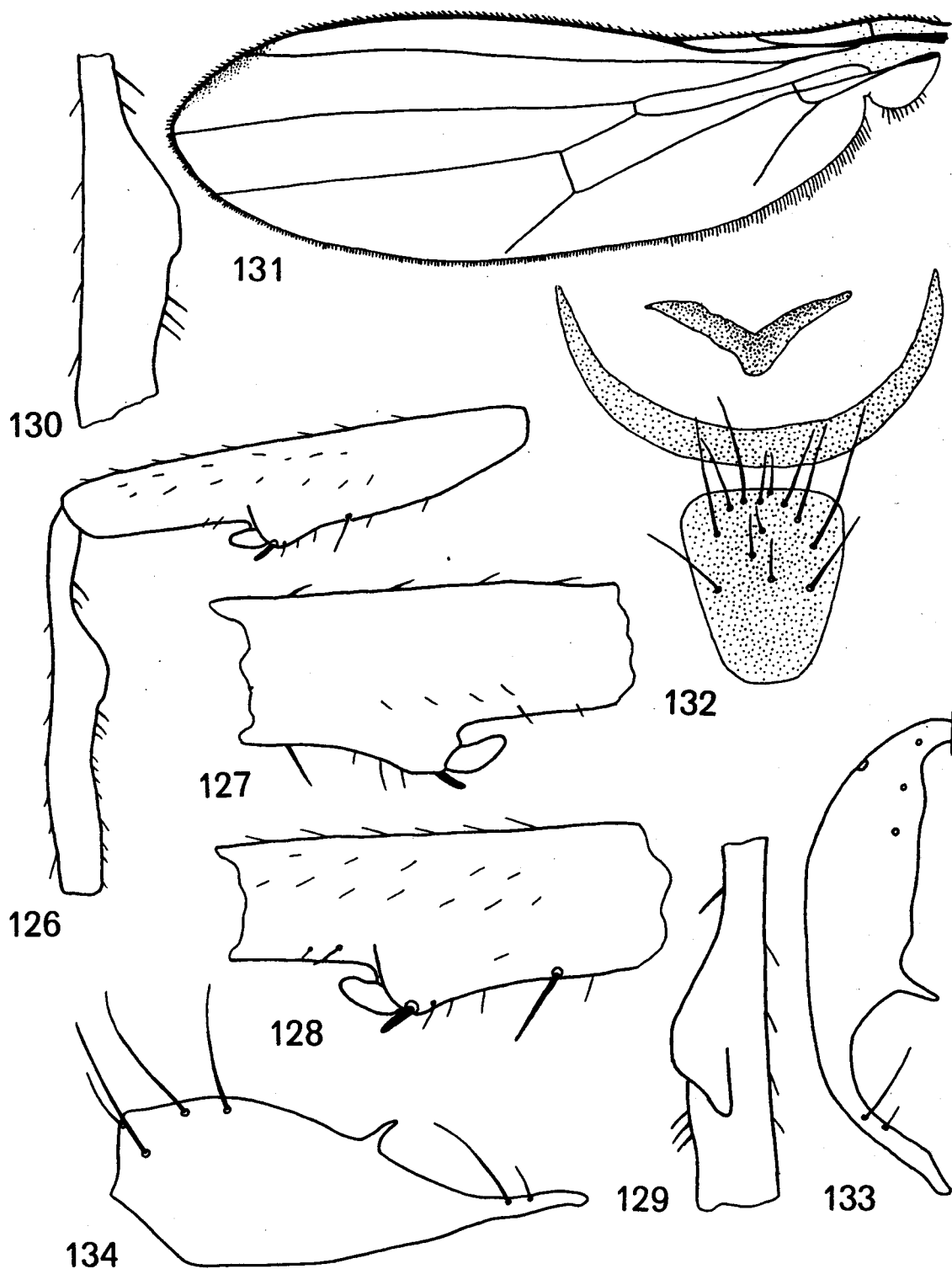
Legs yellow, only apical third of mid femur and basal third or basal half of mid and hind tibiae usually brownish; tarsomeres 3-5 of foreleg as well as tarsomeres 4 and 5 of midleg and hindleg black. Fore coxa with a dorsal bristle near apex; male foreleg modified as in Figs. 126-130; mid femur with a row of short setulae on anterior surface; mid tibia with an anteroventral bristle in apical third and the following apical bristles: anteroventral, posteroventral, and anterodorsal; femur and tibia of hindleg without bristles.

Wing (Fig. 131) clear, only slightly darkened along costal vein below apex of R_{2+3} ; basal costal cell and costal cell clear; veins dark brown. Anal vein long, almost reaching wing margin. Alula broad. Calypters and their margins white. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter white.

Abdomen black, shining, not constricted after tergite 1+2, without strong bristles; sternites 4 and 5 of male as in Fig. 132. Epandrium and surstyli black; surstyli symmetrical as in Figs. 133, 134.

Length of body: 3.1-4.9 mm. Length of wing: 2.8-4.6 mm.

MATERIAL EXAMINED. TYPE. Lectotype (♂) and paralectotype (♀), labelled "Colombia, Uihelyi, Sierra S. Lorenzo" (MNHU). OTHER SPECIMENS. ECUADOR, *Napo*: Baeza (22 km W), 8000 ft, 15.V.1975 (P.Spangler), 4 ♀♀ (USNM); *Pichincha*: road from Nono to Nanegalito, 44 km, 11.IV.1977 (E.R.Hodges), 1 ♂, 5 ♀♀ (USNM);



Figs. 126-134. *Phalacroseps laticornis*, ♂: 126 - foreleg, posterior view; 127 - fragment of fore femur, anterior view; 128 - same, posterior view; 129 - fragment of fore tibia, anterior view; 130 - same, posterior view; 131 - wing; 132 - abdominal sternites 4 and 5; 133 - epandrium and surstylus, dorsal view; 134 - same, lateral view.

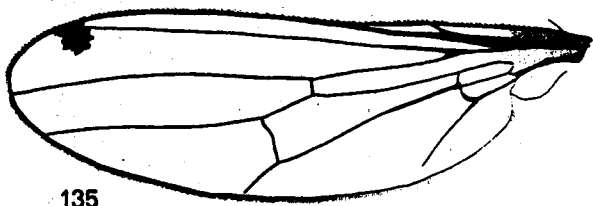


Fig. 135. *Phalacrosepsis peruana* sp.n., female wing.

Quito (48 km S), 6.V.1975 (A.Gurney), 2 ♀♀ (USNM).
RANGE. Colombia, Ecuador.

NOTE. The lectotype of *P.laticornis* was designated by Ozerov [1992].

Phalacrosepsis peruana sp.n.
 Fig. 135.

DESCRIPTION. FEMALE. Head in profile roundish. Frons black but reddish-yellow anteriorly; face and gena yellow; subgena dark brown; antennal groove blackish; postcranium black. Frons shining; gena, face, antennal groove, and postcranium greyish pruinose. Gena subequal to one third of the width of first flagellomere. Eye in profile slightly higher than long. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of thin setulae. 1-2 vibrissae. Antenna reddish-yellow, only first flagellomere darkened. First flagellomere microtomentose, 2 times as long as wide, with a black, bare arista.

Thorax black. Scutum brownish pruinose; proepisternum greyish pruinose; lower part of proepimeron and dorsal margin of katapisternum anteriorly silvery-grey pruinose; metepisternum completely shining; other parts of pleural sclerites subshining; scutellum dark brown pruinose. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; proepisternum with several short hairs near lower margin; proepimeron with 1-2 hairs anteriorly; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; katapisternum with several hairs near dorsal margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Fore coxa and tibia completely, base and apex of mid and hind femora, apical quarter of mid tibia, tarsomeres 1 and 2 of foreleg as well as tarsomeres 1-3 of midleg and hindleg yellow; other parts of legs dark brown to black. Fore coxa with a dorsal bristle near apex; fore femur simple, without strong bristles, as well as fore tibia; mid femur with a row of short setulae on anterior surface; mid tibia with 1

strong anteroventral bristle at the middle, 2-4 strong posteroventral, 1 anteroventral apical, and 1 posteroventral apical bristles; hind tibia with 1-2 thin apical bristles anteriorly.

Wing (Fig. 135) clear but with a sharply delimited dark spot near costal vein below apex of R_{2+3} ; basal costal cell dark brown; veins brown. Anal vein long, almost reaching wing margin. Alula broad. Calypters and their margins greyish. Margin of upper calypter with hairs; margin of lower calypter without hairs. Halter yellowish.

Abdomen dark black, subshining, not constricted after tergite 1+2; tergites 3-5 each with a row of thin marginal bristles.

Length of body: 5.3-5.5 mm. Length of wing: 4.8-4.9 mm.

DIAGNOSIS. Resembling *Ph.dicolor*, *Ph.polychaeta*, and *Ph.umbriifer*, but easily distinguishable in the following: katapisternum pruinose along dorsal margin only anteriorly, while posteriorly pruinosity absent; wing with sharply delimited preapical spot.

TYPE MATERIAL. Holotype: ♀, "1800 m, 11°3' S., 75° 17' W.Greenw., 13.II.06, N.Iconnicoff" (ZMUM). Paratype ♀, same place, 16.II.1906, N.Iconnicoff (ZMUM).

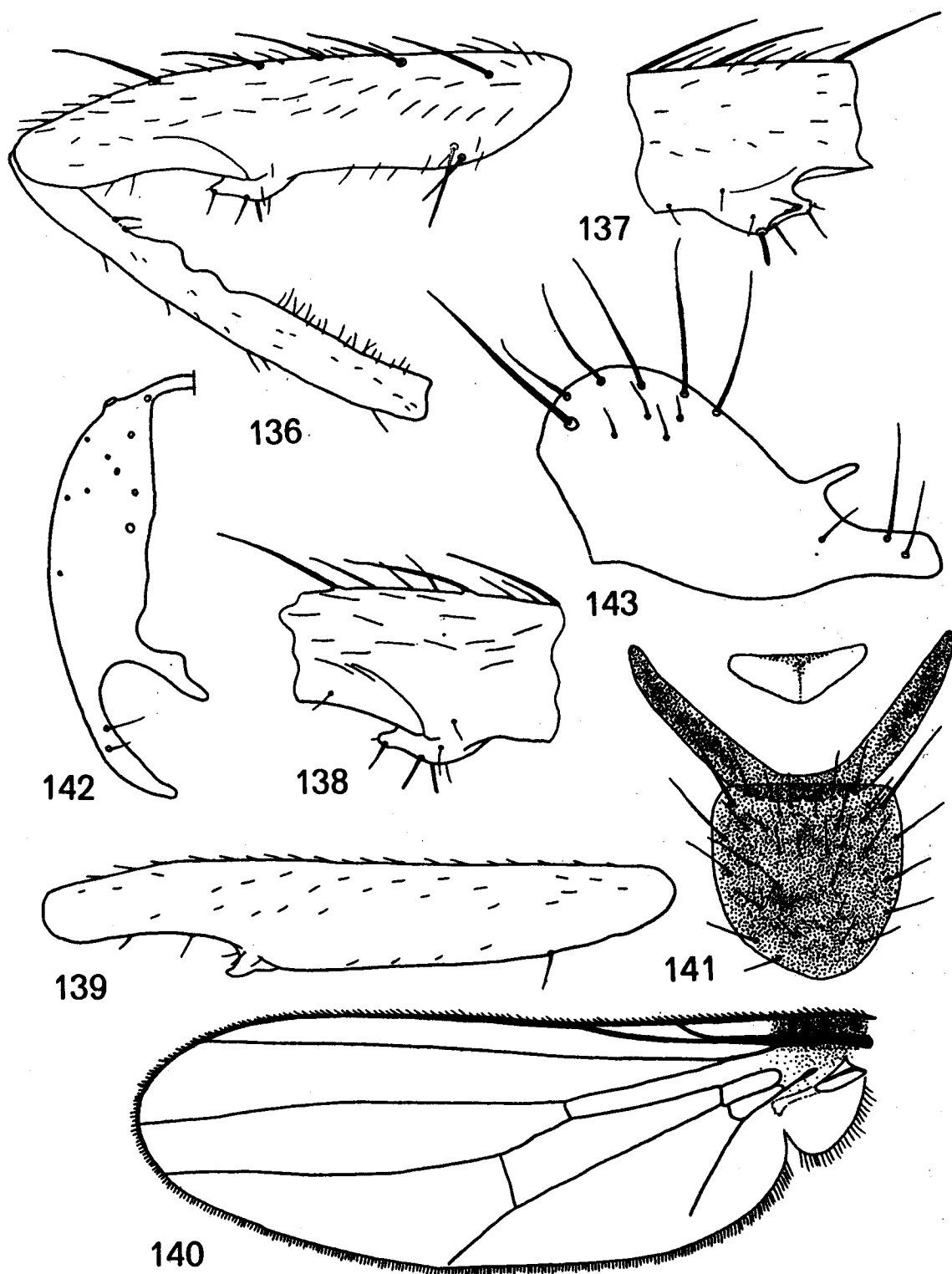
RANGE. Peru.

Phalacrosepsis pleuralis (Coquillett)
 Figs. 136-143.

Sepsis pleuralis Coquillett, 1904 : 35.

DESCRIPTION. MALE, FEMALE. Head in profile roundish. Frons dark brown to black, except for yellow lower third; face, gena, subgena, and lower two thirds of postcranium reddish-yellow (rarely brown); upper third of postcranium dark brown to black; antennal groove blackish. Frons shining; face, gena, antennal groove, and postcranium greyish pruinose. Gena subequal to one third of the width of first flagellomere. Eye in profile slightly higher than long. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of setulae. 2-3 vibrissae. Antenna reddish-yellow. First flagellomere microtomentose, 2.5 times as long as wide, with a reddish, bare arista.

Thorax reddish-yellow (rarely brown), only scutum and mediotergite mostly black. Scutum, katatergite, anatergite and scutellum completely grey pruinose; mediotergite shining, only along lateral margins grey pruinose; proepisternum and proepimeron shining but each along ventral margin silvery-grey pruinose; anepisternum and anepimeron shining; katapisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny;



Figs. 136-143. *Phalacrosepsis pleuralis*: 136 - male foreleg, posterior view; 137 - fragment of male fore femur, anterior view; 138 - same, posterior view; 139 - female fore femur, anterior view; 140 - wing; 141 - abdominal sternites 4 and 5; 142 - epandrium and surstylus, dorsal view; 143 - same, lateral view.

katepimeron, meron, and metepisternum subshining. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals. Besides this, male scutum with a row of thin setulae along each *acr* and *dc* line, with numerous setulae between *ial* and *spal* lines. In female these setulae very small, rarely absent; postpronotal lobe with several hairs; proepisternum with several hairs and a bristle near lower margin; proepimeron with 1-2 hairs anteriorly; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; katepisternum with several hairs near dorsal margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimera membranous.

Legs reddish-yellow, only mid and hind tibiae brownish to dark brown, tarsomeres 3-5 of foreleg as well as tarsomeres 4 and 5 (rarely also tarsomere 3) of midleg and hindleg black. In male: fore coxa with a strong dorsal bristle near apex and a row of dorsal setulae; foreleg modified as in Figs. 136-138; mid femur with a row of setulae on anterior surface, with an anteroventral and a posteroventral bristles at middle, with a posterodorsal bristle in apical quarter; mid tibia with 3 anterodorsal and 2 posterodorsal bristles in apical half, 1 ventral bristle at middle, with a ring of strong apical bristles; hind femur with 2-4 dorsal, 3-5 anterodorsal, and 3-5 posterodorsal bristles in apical half, with 1-2 anterior, 1-2 anteroventral, and 1-2 dorsoventral bristles near middle; hind tibia with 2-4 anterodorsal and 2-4 posterodorsal bristles in apical half, 1 preapical dorsal, and 1-2 strong anterior apical bristles. In female: fore coxa with a dorsal bristle near apex; fore femur modified as in Fig. 139; fore tibia simple, with small dorsal preapical setulae; mid femur with a row of short setulae on anterior surface; mid tibia with 1 ventral bristle at apical third, 1 posterodorsal bristle at middle, 1 dorsal preapical, 1 strong anteroventral apical, and 1 posteroventral apical bristles; hind femur with a posterodorsal bristle in apical quarter; hind tibia with 1-2 anterodorsal and 1-2 posterodorsal bristles near middle, 1 dorsal preapical, and 1-2 anterior apical bristles.

Wing (Fig. 140) clear, only basal costal cell and basal half of costal cell dark brown. Veins brown. Anal vein long, almost reaching wing margin. Alula broad. Calypters and their margins whitish to yellowish. Margin of upper calypter with long hairs. Margin of lower calypter without hairs. Halter yellowish.

Abdomen mostly dark brown to black, not constricted after tergite 1+2. Male: tergites 5 and

6 usually reddish-yellow; tergites 4 and 5 each with a row of long marginal bristles; sternites 4 and 5 as in Fig. 141; epandrium and surstyli reddish-yellow; surstyli slightly asymmetrical as in Figs. 142-143. Female: all tergites with numerous thin hairs only, without bristles.

Length of body: 3.5-5.6 mm. Length of wing: 2.8-4.3 mm.

MATERIAL EXAMINED. TYPE. Holotype, ♀, with labels "Brownsville, Tex., VI.", "Catal. No 1400", "Brooklyn Museum, Coll. 1929", "Type No 42249, U.S.N.M." (USNM). OTHER SPECIMENS. GUATEMALA, *Chimaltenango*: Yepocapa, 4.VI.1947 (H.T.Dalmat), 1 ♀ (USNM); Yepocapa, X.1948 (H.T.Dalmat), 1 ♂, 1 ♀ (USNM). PANAMA, *Chiriqui*: Cerro Punta, 6000 ft, X.1953 (N.L.H.Krauss), 1 ♂ (AMNH); El Volcan, 8°11'N, 81°44'W, 21.VI.1953 (F.S.Blanton), 1 ♀ (USNM). UNITED STATES, *Texas*: Victoria, 25.V.1907 (J.D.Mitchell), 1 ♀ (ZMUM).

RANGE. Guatemala, Panama, United States.

NOTE. *S. pleuralis* was described based on a single specimen claimed to be a male [Coquillett, 1904], the holotype actually appears to be a female, in good condition.

Phalacrosepsis polychaeta (Ozerov)

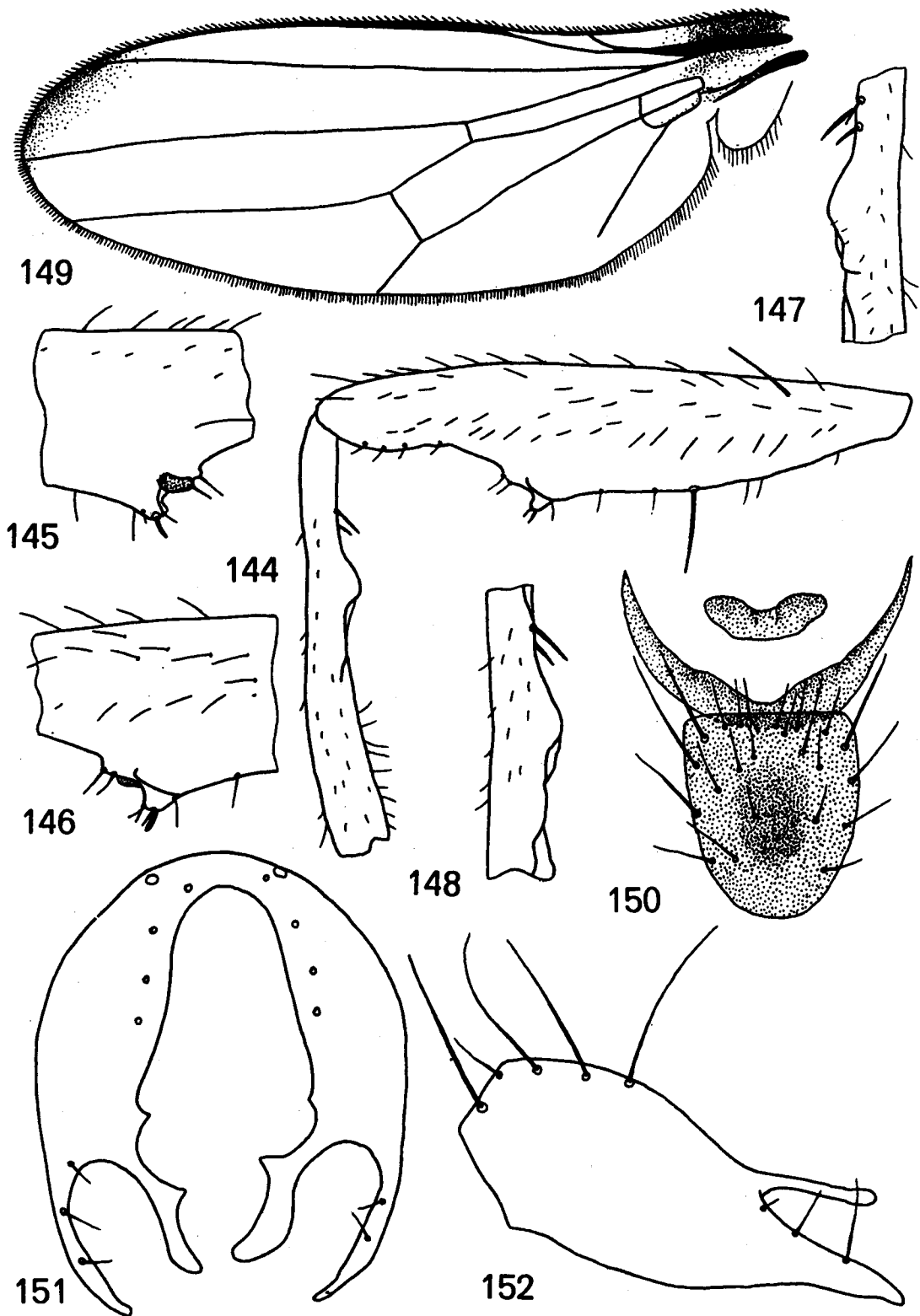
Figs. 144-152.

Palaeosepsis polychaeta Ozerov, 1993 : 63.

DIAGNOSTIC DESCRIPTION. MALE, FEMALE. Thorax black. Scutum brownish pruinose; meron grey pruinose. Two postsutural dorsocentral bristles present. Posteroventral area of thorax behind and above hind coxae between metepimera membranous. Male foreleg modified as in Figs. 144-148. Hind femur with several anterodorsal bristles in apical third; hind tibia with 1 dorsal bristle at apex, 1 anterior apical, and 1 ventral apical bristles. In addition, male hind femur with 1-2 strong posteroventral and 1-2 posterodorsal bristles in apical third; hind tibia with 1 anterodorsal and 1 posterodorsal bristles at middle. Wing (Fig. 149) with weak brownish tinge, darkened along costal vein below apex of R_{2+3} ; basal costal cell and basal half of costal cell dark brown. Sternites 4 and 5 of male as in Fig. 150. Surstyli as in Figs. 151, 152.

Length of body: 3.5-5.6 mm. Length of wing: 2.8-4.3 mm.

MATERIAL EXAMINED. TYPE. Holotype, ♂, labelled "Barro Colorado Isld., Canal Zone, 22.XII.1928, C.H.Curran" (AMNH); paratypes: Panama, Canal Zone, Barro Colorado Isld. (C.H.Curran), 2 ♀♀ (AMNH, ZMUM); same place, 5-28.I.1929 (C.H.Curran), 3 ♂♂, 4 ♀♀ (AMNH, ZMUM); same place, 13.II.1929 (C.H.Curran), 1 ♂ (AMNH); Panama, Canal Zone, Fort Sherman (C.H.Curran), 1 ♀ (AMNH); Panama, Barro Colorado Nat. Monm., 20.II-13.III.1985 (D.A.Grimaldi), 1 ♂ (ZMUM); Panama,



Figs. 144-152. *Phalacrosepsis polychaeta*, ♂: 144 - foreleg, posterior view; 145 - fragment of fore femur, anterior view; 146 - same, posterior view; 147 - fragment of fore tibia, anterior view; 148 - same, posterior view; 149 - wing; 150 - abdominal sternites 4 and 5; 151 - epandrium and surstyli, dorsal view; 152 - same, lateral view.

Cocle: El Valle, 500-600 m, Jul. 1981 (N.L.H.Krauss), 2 ♀♀ (AMNH); 4 males, 1 female, Costa Rica: Heredia, ca. 12 km SW Horquetas (Rara Avis), 550 m, on dung, 18-23.I.1989 (D.A.Grimaldi), 4 ♂♂, 1 ♀ (AMNH); "Higuito, San Mateo CR, coll. Pablo Schild", 1 ♂ (USNM); Honduras, La Ceiba, 18.X.1916 (F.J.Dver), 1 ♂ (ZMUM). OTHER SPECIMENS. BRASIL, *Amapa*: Serra do Navio, 30.IX.1957 (J.Lane), 1 ♂ (USNM). COSTA RICA, province?: "Pedregoso", (D.L.Rounds), 5 ♂♂, 2 ♀♀ (USNM); "Higuito, San Mateo", (P.Schild), 6 ♂♂, 2 ♀♀ (USNM); *Cartago*: Turrialba, 15-19.VII.1965 (P.J.Spangler), 4 ♂♂, 9 ♀♀ (USNM). PANAMA, *Chiriqui*: Potrerillos, 8 11'N, 81 44'W, 27.IV.1934 (D.V.Brown), 1 ♂ (USNM). VENEZUELA, *Barinas*: Barinitas, XII.1942 (P.Anduze), 2 ♂♂ (USNM).

RANGE. Brasil, Costa Rica, Honduras, Panama, Venezuela.

Phalacrosepsis pusio (Schiner)

Figs. 153-160.

Sepsis pusio Schiner, 1868 : 262.

DESCRIPTION. MALE, FEMALE. Head and eye in profile roundish. Frons black but brownish anteriorly or black completely; face and gena yellow; subgena brownish to black; antennal groove blackish; postcranium black. Frons shining; gena subshining; face, antennal groove, and postcranium greyish pruinose. Gena subequal to half width of first flagellomere. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of thin setulae. 1 vibrissa. Antenna reddish-yellow, slightly darkened along anterior margin. First flagellomere microtomentose, 1.5 times as long as wide, with a black, bare arista.

Thorax black. Scutum shining but anterior part of postpronotal lobe, lower part of notopleuron, and surface between lines of dorsocentral bristles from the middle of scutum or anterior dorsocentral bristles to scutellum brownish pruinose; proepisternum and proepimeron shining but each along ventral margin silvery-grey pruinose; anepisternum, anepimeron, and katapimeron shining; katapisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny; meron, metepisternum, katatergite, and anatergite greyish pruinose; mediotergite shining but greyish pruinose along lateral margins. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 2 postsutural dorsocentrals; proepisternum with several thin and short hairs near ventral margin; anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Poster-

oventral area of thorax behind and above hind coxae between metepimera membranous.

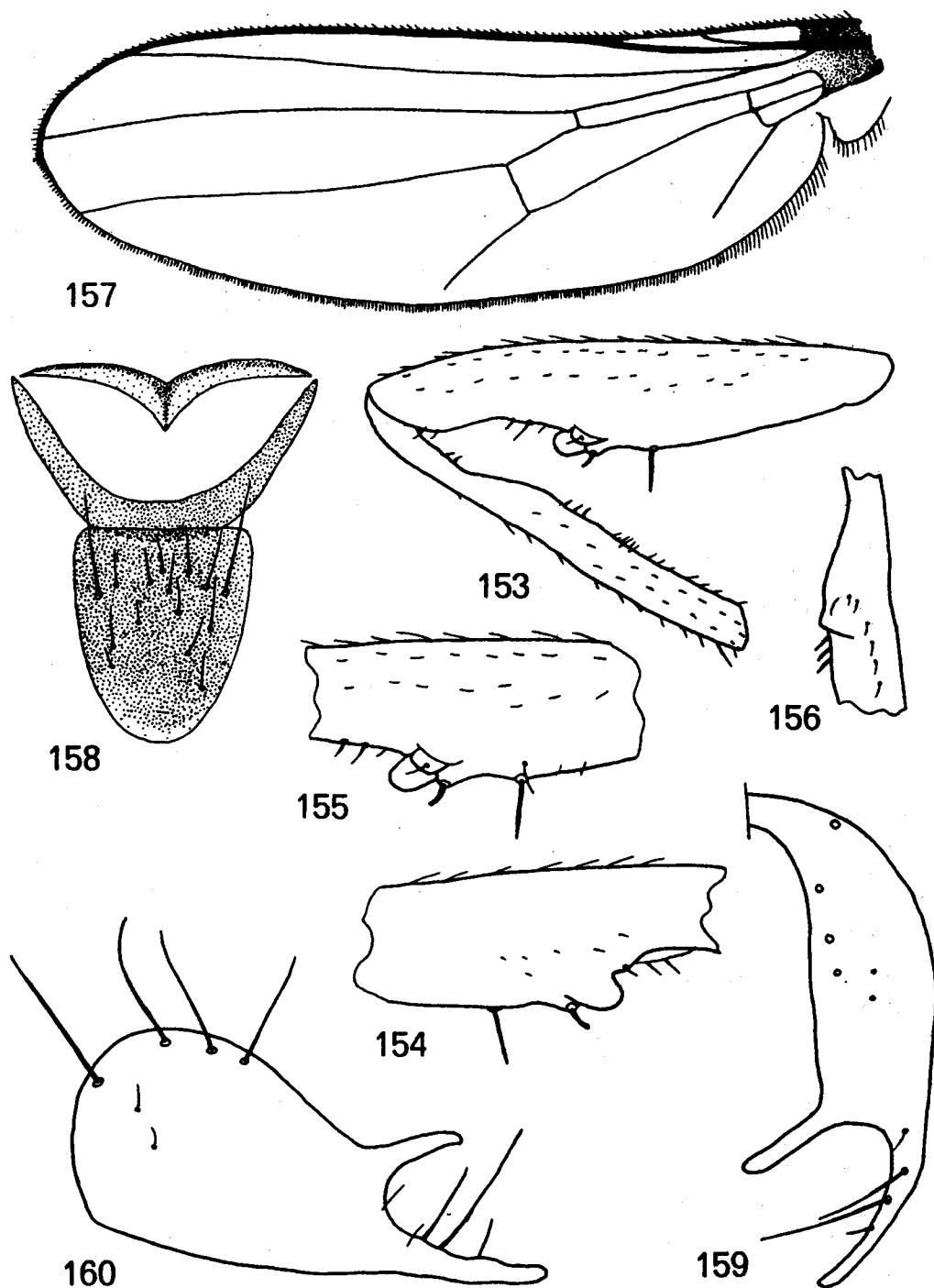
Legs yellow, only apical three quarters or middle part of mid and hind femora, basal half or basal three quarters of mid tibia, and hind tibia brown to black; tarsomeres 3-5 of foreleg as well as tarsomeres 4 and 5 of midleg and hindleg black. Fore coxa with a dorsal bristle near apex; male foreleg modified as in Figs. 153-156; mid femur with a row of short setulae on anterior surface; mid tibia with an anteroventral bristle in apical third and the following apical bristles: anteroventral, posteroventral, and anterodorsal; femur and tibia of hindleg without bristles.

Wing (Fig. 157) clear, only basal costal cell and basal half of costal cell dark brown; veins brownish. Anal vein long, almost reaching wing margin. Alula broad. Calypters and their margins whitish to greyish. Margin of upper calypter with long hairs; margin of lower calypter without hairs. Halter white.

Abdomen black, shining; not constricted after tergite 1+2. Tergites 3-5 of male and usually tergites 4 and 5 of female each with a row of thin marginal bristles; sternites 4 and 5 of male as in Fig. 158. Epandrium and surstyli brown to black; surstyli symmetrical as in Figs. 159, 160.

Length of body: 2.5-4.4 mm. Length of wing: 1.8-2.9 mm.

MATERIAL EXAMINED. TYPE. 3 syntypes (♂ and 2 ♀♀), all labelled "Lindig, 1864, Venezuela" (NHMW). OTHER SPECIMENS (497 ♂♂, 879 ♀♀, dates and collectors' names omitted). ANTILLES: ANTIGUA, St. John's, 0-100 m, (AMNH, ZMC); CUBA, Herradura (AMNH), Zaza d. Media (AMNH), Camaguey (USNM), Soledad (USNM), San Carlos Est. (AMNH), Lomas de Camoa (USNM) Santiago de Cuba (AMNH); BARBADOS, St. Thomas (USNM); DOMINICA, Clarke Hall (USNM), Laudet (AMNH), Portsmouth, 0-100m. (AMNH, ZMC), Roseau (AMNH, ZMC); Springfield Plantation (USNM); GUADELOUPE, Grande Terre (AMNH); GRENADA, Calliste, nr. Point Saline (USNM), St. Georges (USNM); HAITI (DOMINICAN REPUBLIC), San Lorenzo (AMNH), 6 km W of Ciudad Trujillo (= Santo Domingo) (USNM), 6 km NW Paraiso, Rio Nizao, 170 m (CMNH), 9 km S Loma de Cabrera, 620 m (CMNH), 10 km S Loma de Cabrera, 650 m (CMNH), 9.5 km W El Valle (CMNH), Parque Los Haitises, E of Trepada Alta, 12 km W El Valle, 145 m (CMNH), Sierra de Neiba just south of crest, 5 km NNW Angel Feliz, 1780 m (CMNH), 2 km N Bayahibe, 10 m (CMNH), 7 km NNE Boca de Chavon, at Rio Chavon, 20 m (CMNH), 10 km S Constanza (USNM), 14.5 km N Cabo Rojo, 165 m (CMNH), 26 km N Cabo Rojo, 730 m (CMNH), La Abeja, 38 km NHW Cabo Rojo, 1250 m (CMNH), 3.3 km N Los Arroyos, 1450 m (CMNH), Sanchez (AMNH); HAITI (HAITI), Limbe, Good Samaritan Hospital (USNM), Port-au-Prince (USNM); JAMAICA, Annotto



Figs. 153-160. *Phalacrosepsis pusio*, ♂: 153 - foreleg, posterior view; 154 - fragment of fore femur, anterior view; 155 - same, posterior view; 156 - fragment of fore tibia, anterior view; 157 - wing; 158 - abdominal sternites 4 and 5; 159 - epandrium and surstylus, dorsal view; 160 - same, lateral view.

Bay (USNM), Chestervale, Yallahs River (USNM), 1.5 km S Cousins Cove nr. Cousins Cove Cave ♂1, 50 m (USNM), Hardwar Gap (USNM), Kingston (USNM), 5 mi E Negril (USNM), Runaway Bay (USNM); MARTINIQUE, Fort-de-France (USNM), Morne Rouge (AMNH), St. Pierre (USNM); MONTERRAT, Galway's Estate (USNM); PUERTO RICO, Adjuntas (AMNH), Aibonito (AMNH), Aguas Buenas (USNM); Arecibo (AMNH), Barranquitas (USNM), Bayamon (USNM), Caguas (AMNH), Cayey, (AMNH, USNM), Coamo Springs (AMNH), Corozal (USNM), Ensenada Honda (USNM), Isabela (USNM), Lomatitaja, Las Cartegena (AMNH), Manati (AMNH, USNM), Mayaguez (AMNH, USNM), Naguabo (AMNH), Fortuna Agr. Exp. Sta. (USNM), San Juan (AMNH, ZMC), Tortuguero (USNM), Utuado (USNM); ST. KITTS, Basseterre (ZMC); ST. LUCIA, Lucilia Castries (AMNH, USNM); ST. VINCENT, Camden (USNM), Kingstown (USNM); Montreal (USNM), Richmond Beach (USNM); TRINIDAD, Friendship Estate (USNM), La Brea (USNM); VIRGIN ISLANDS, St. Croix: Christiansted (AMNH), Hamilton Field (USNM), Spring Gut (USNM), St. Thomas: Charlotte Amalie (AMNH, USNM), Tortola: Buntin Ghut, 5 m (USNM). ARGENTINA, Alto Parana: Curitiba (USNM); Catamarca: Valla Viejo (IZML); Chaco: Colonia Benitez (IZML); Formosa: Clorinda (IZML), Mision Laichi (IZML); Pirane (IZML); Jujuy: Palpala (IZML); (IZML); Misiones: Bemberg (IZML), Iguazu (USNM), Posadas (USNM), Santa Ana (IZML); Salta: Urundel (IZML); Tucuman: Lacavera (IZML), Queb. La Toma (IZML), Trancas (IZML), V. Padre Monti (IZML). BOLIVIA, Beni: El Porvenir Stn. NE of San Borja (USNM), Riberalta (USNM), Rosario, Lake Rogagua (USNM), Rurrenabaque (USNM); La Paz: Alto Rio Beni, south of Rio Inicua, 1100 m (AMNH), Tumupasa (USNM). BRASIL, Mato Grosso do Sul: Maracaju (USNM); Rio de Janeiro: Rio de Janeiro (USNM); Sao Paulo: Sao Paulo (ZMUM). COLOMBIA, Tolimo: Armero (USNM), Armero (USNM); Valle: Cauca Valley, alt. 3260 ft. (AMNH), Cauca Valley, Quebrada Seca (AMNH). COSTA RICA, Cartago: Cartago (AMNH, USNM); Limon: Limon (USNM); Puntarenas: 9 mi NW Esparta (USNM); Reserva Biologica Carara nr. Rio Grande del Tarcoles (AMNH); San Jose: San Antonio de Escazu, 1300 m, (USNM), San Isidro, 7-800 m (ZMC), San Jose (AMNH, ZMC, USNM). EL SALVADOR, San Salvador: Tonacatepeque (USNM). ECUADOR, Azuay: Rircay (USNM); El Oro: Pinas (USNM); Guayas: Balao (USNM), Balzar (USNM), Naranjal (USNM), Monserrat (USNM); Loja: Catamayo (USNM), Napo: 8 km W Lago Agrio (USNM), Tena (USNM); Pastaza: Puyo (USNM), 25 km N Puyo (USNM), Puyo (USNM); Zamora Chiriqui: Cumbabatza (USNM), Zumbi (USNM). GUATEMALA, Alta Verapaz: Coban (AMNH); Baja Verapaz: Salama, 3000 ft. (AMNH); Chimaltenango: Yepocapa (USNM), Yepocapa (USNM); Guatemala: Amatitlan, 4000 ft (AMNH); Izabal: Quirigua (USNM), Puerto Barrios (USNM); Peten: Santa Elena, 120-160 m (AMNH); Sacatepequez: Antigua (USNM); Suchitepequez: Variedades, 500 ft. (AMNH). GUYANA, Demerara: Georgetown, 0-50 m

(AMNH), Linden (AMNH). HONDURAS, Francisco Morazan: El Zamorano (USNM), Tegucigalpa (AMNH, USNM); Yoro: Morazan (USNM). MEXICO, Campeche: Champaton (USNM); Chiapas: Puente Macalapa (USNM), Tuxtla Gutierrez (USNM); Hidalgo: 2 mi SW Jacala (USNM); Michoacan: Uruapan (AMNH, USNM); Morelos: Cuernavaca (USNM), Cuernavaca (USNM); Nayarit: Tepic (USNM); Oaxaca: Oaxaca (USNM), Tehuantepec (USNM); Veracruz: Cordoba (USNM); Fortin de las Flores (USNM), Veracruz (USNM). NICARAGUA, Esteli: 31 mi N Esteli (USNM); Managua: Managua (USNM); Zelaya: Puerto Cabezas (USNM). PANAMA, Chiriqui: Concepcion (USNM), David (USNM), 2.6 km S Guabala on Rio Jacube, 5 m, (USNM), 3.5 km W Puerto Vidal, Rio Tabasara, 10 m (USNM); Cocle: Aguadulce (USNM), Cerro Pena, nr. El Valle (USNM), El Valle (USNM); Herrera: Ocu (AMNH, USNM); Panama: Barro Colorado Isld. (AMNH, USNM). PARAGUAY, Central: Asuncion (USNM), San Lorenzo (USNM); Guaira: Villarrica (USNM); Parana: SW Saltos del Guaira (AMNH). PERU, Huanuco: Acomayo (20 km N Huanuco) (USNM); Lima: Hualal (USNM); Loreto: San Antonio (USNM). UNITED STATES, Florida: Miami (USNM); Georgia: Liberty CO., St. Catherines Island (AMNH). VENEZUELA, Aragua: 2 km N Ocumare de la Costa (USNM), 2 km N Ocumare de la Costa (USNM), Portachuelo Pass (USNM), Puerto de Cata (USNM); Barinas: Caipe (USNM); Guarico: Hato Masaguaral (44 km S Calabozo) (USNM); Merida: Tovar (USNM); Zulia: Carrasquero (USNM), 6 km W La Concepcion (USNM), El Tucuco, 45 km SW of Machiques (USNM).

RANGE. Antilles, Argentina, Bolivia, Brasil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, United States, Venezuela.

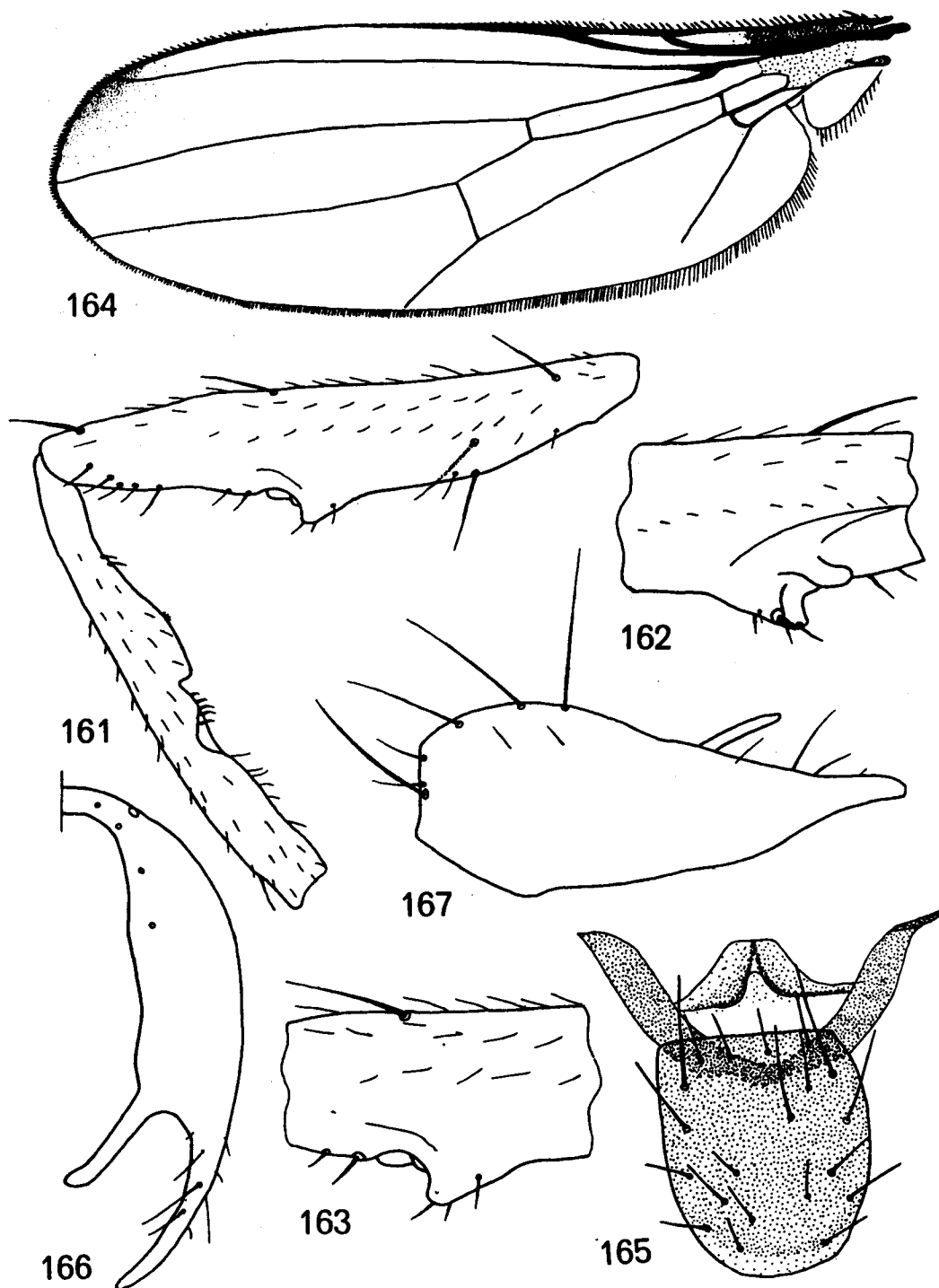
NOTE. *S. pusio* was described from one male and 5 females. I have examined 3 syntypes (♂ and 2 ♀♀), labelled "Lindig, 1864, Venezuela" from NHMW. The male was studied by Silva before me and was labelled as the lectotype of *S. pusio*. Silva wrote to me that she was going to publish these results, but I have not seen that work till now.

Phalacrosepsis umbrifer (Schiner)

Figs. 161-167.

Sepsis umbrifer Schiner, 1868 : 262.

DESCRIPTION. MALE, FEMALE. Head in profile roundish. Frons black, sometimes partly brownish anteriorly; face and gena yellow to brown; subgena dark yellow to dark brown; antennal groove blackish; postcranium black. Frons shining; gena subshining; face, antennal groove, and postcranium greyish pruinose. Gena subequal to half width of first flagellomere. Eye in profile slightly higher than long. Head with the following paired bristles: 1 ocellar, 1 postocellar, 1 inner vertical, and 1 outer vertical. Gena with a row of setulae. 2-3 vibrissae.



Figs. 161-167. *Phalacrosepsis umbrifer*, ♂: 161 - foreleg, posterior view; 162 - fragment of fore femur, anterior view; 163 - same, posterior view; 164 - wing; 165 - abdominal sternites 4 and 5; 166 - epandrium and surstylus, dorsal view; 167 - same, lateral view.

Antenna reddish-yellow to dark reddish-brown. First flagellomere microtomentose, 2 times as long as wide, with brown to black, bare arista.

Thorax black. Scutum brownish pruinose. Proepisternum and proepimeron shining but each along ventral margin silvery-grey pruinose; anepisternum, anepimeron, and katepimeron shining; katepisternum with a stripe of dense silvery pruinosity along dorsal margin, otherwise shiny; meron, metepisternum, katatergite, and anatergite greyish pruinose; mediotergite subshining but greyish pruinose along lateral margins; scutellum dark brown pruinose. Scutum with a row of thin setulae along each *dc* and *ial* line, with a row of thin setulae between *acr* lines, with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar, and 1 postsutural dorsocentral (in female setulae thinner and shorter than in male); postpronotal lobe with several long hairs; proepisternum with several hairs and a bristle near ventral margin; proepimeron in male with 1-2 hairs and a bristle anteriorly, in female usually with hairs only. anepisternum bearing sparse hairs posteriorly, with a bristle near posterior margin; katepisternum with a row of thin setulae near dorsal margin; apical scutellar bristles long and strong, basal scutellar bristles short and hair-like. Posteroventral area of thorax behind and above hind coxae between metepimeron membranous.

Fore coxa and tibia completely, fore femur on anterior surface, base of mid and hind femora, usually apical quarter of mid and hind femora, apical third or quarter of mid tibia, tarsomeres 1 and 2 of foreleg (rarely first only) as well as tarsomeres 1-3 of midleg and hindleg yellow; other parts of legs dark brown to black; sometimes mid and hind femora as well as tibiae mostly yellow. In male: fore coxa with 1 dorsal bristle near apex, 1 dorsal bristle near base, and several dorsal setulae between them; foreleg modified as in Figs. 161-163; mid femur with a row of setulae on anterior surface and a posterodorsal bristle in apical quarter; mid tibia with 1-3 anterodorsal bristles, 1 ventral bristle in apical third, 1-2 posterodorsal bristles in apical half, 1 dorsal preapical, and a ring of apical bristles; hind femur with 1-3 dorsal; 3-5 anterodorsal, and 2-3 posterodorsal bristles in apical half, with 1-2 anteroventral bristles at middle; hind tibia, with 1-2 anterodorsal and 1-2 posterodorsal bristles near middle, 1 preapical dorsal, and 1-2 strong anteroventral apical bristles. In female: fore coxa with a posterodorsal bristle near apex; fore femur and tibia simple, without strong bristles; mid femur with a row of thin short bristles on anterior surface, rarely with a strong posterodorsal bristle in apical quarter; mid tibia with 1

strong ventral bristle in apical third, 1 strong dorsal preapical bristle, and the following apical bristles: anteroventral, posteroventral, and posterior; hind femur with 1-2 anterodorsal and 1-2 posterodorsal thin bristles in apical half; hind tibia with 1-2 strong posterodorsal and 1-2 anterodorsal bristles near middle, with 1 preapical dorsal and 1 strong anterior apical bristles.

Wing (Fig. 164) clear but with dark spot near costal vein below apex of R_{2+3} ; basal costal cell and basal half of costal cell dark brown; veins brown. Anal vein long, almost reaching wing margin. Alula broad. Calypters and their margins whitish. Margin of upper calypter with long hairs. Margin of lower calypter without hairs. Halter yellowish.

Abdomen dark brown to black, subshining, not constricted after tergite 1+2; tergites 4 and 5 of male each with a row of thin marginal bristles; tergites of female without bristles; sternites 4 and 5 of male as in Fig. 165. Epandrium and surstyli yellow to light brown; surstyli symmetrical as in Figs. 166, 167.

Length of body: 4.0-6.3 mm. Length of wing: 3.5-6.0 mm.

MATERIAL EXAMINED. TYPE. Lectotype (♂) and 2 paralectotypes (both ♀♀), labelled "Lindig, 1864, Venezuela" (NHMW). OTHER SPECIMENS. ARGENTINA, province?: "Juidy los Perales", 3.II.1950 (Monros, Willink), 1 ♀ (IZML); *Salta*: San Lorenzo, 20.I.1949 (M. Aczel), 1 ♀ (IZML). COLOMBIA, *Boyaca*: Tunja, 1975 (A.L. Varela), 5 ♂♂, 7 ♀♀ (USNM); Tunja, VII.1978 (R. Vergara Ruiz), 3 ♂♂, 1 ♀ (USNM); *Valle*: Bet. Querebral and Buenaventura, alt. 3500-4000 ft, 3.II.1935 (H.F. Schwarz), 1 ♂ (AMNH); Cali District, Western Cordillera, alt. 5500 ft, 19.II.1935 (E.I. Huntington), 1 ♀ (AMNH). ECUADOR, *Chimborazo*: Chilicay, VII.1955 (L. Castillo), 1 ♂ (USNM); *Napo*: Baeza, 14.IV.1977 (E.R. Hodges), 2 ♂♂, 4 ♀♀ (USNM); Baeza (22 km W), 8000 ft, 15.V.1975 (P. Spangler), 4 ♂♂, 14 ♀♀ (USNM); 10 km SE Baeza, 14.IV.1977 (E.R. Hodges), 1 ♂ (USNM); *Pichincha*: Quito — Santo Domingo (old road), 32 km, 9.IV.1977 (E.R. Hodges), 1 ♀ (USNM); road from Baeza to Papallacta, 188 km, 13.IV.1977 (E.R. Hodges), 1 ♂ (USNM). PERU, *Cuzco*: Machu Picchu, 2300 m, 21-24.X.1972 (P. Wygodzinsky), 1 ♀ (AMNH); *Lima*: Lima, VI.1914 (H.S. Parish), 1 ♀ (USNM). VENEZUELA, *Merida*: Mucuchies, 20.VIII.1967 (R.W. Poole), 1 ♀ (USNM); Santo Domingo, 65°14'W, 01°33'N, 2100 m, 29.V.1988 (A.L. Norrbom, G.J. Steck), 1 ♂ (USNM).

RANGE. Argentina, Colombia, Ecuador, Peru, Venezuela.

Genus *Pseudopalaeosepsis* Ozerov

Pseudopalaeosepsis Ozerov, 1992 : 83. Type-species: *Pseudopalaeosepsis nigricoxa* Ozerov, 1992 (mon.).

DIAGNOSTIC DESCRIPTION. Head in profile roundish. Frons bare. Gena moderate. Eye in profile

slightly higher than long. Ocellar, postocellar, inner vertical, and outer vertical paired bristles present; orbital bristles absent. Occiput without bristles or setulae. One or two pairs of vibrissae. First flagellomere 1.7 times as long as wide. Arista bare.

Thorax black. Scutum brownish pruinose; proepisternum subshining but near ventral margin whitish-grey pruinose; proepimeron shining but along ventral margin silvery-grey pruinose; anepimeron and metepisternum subshining, but anepisternum with a stripe of greyish pruinosity along posterior margin; katapisternum with dense silvery pruinose upper posterior corner, otherwise shiny; meron weakly grey pruinose but with a big subshining spot; katatergite and anatergite weakly grey pruinose; mediotergite shining but greyish pruinose along lateral margins. Scutum with the following paired bristles: 1 postpronotal, 2 notopleurals, 1 supra-alar, 1 postalar and 2 postsutural dorsocentrals; 1 anepisternal bristle and 2 katapisternal setulae present; postpronotal and acrostichal bristles absent. Postcoxal bridge present.

Coxae of all legs dark brown to black. Fore femur of male modified, that of female simple. Hind tibia of male without an osmeterium.

Wing clear, only dark brown in basal costal cell and basal third of costal cell as well as near base of wing; darkened along costal vein between R_{2+3} and M. Anal vein long, almost reaching wing margin; bm-cu crossvein present. Alula moderate, entirely covered with microtrichia. Margin of upper calypter with long hairs. Margin of lower calypter without hairs.

Abdomen slightly constricted after tergite 1+2, without strong bristles; sternite 4 of male extremely short, with long lateral lobes, considerably shorter than sternite 5 (Fig. 74). Surstyli symmetrical.

Pseudopalaeosepsis nigricoxa Ozerov
Figs. 168-176.

Pseudopalaeosepsis nigricoxa Ozerov, 1992 : 83.

DIAGNOSTIC DESCRIPTION. MALE, FEMALE. Head in profile roundish. Gena 3-3.5 times as broad as first flagellomere in width. Eye in profile slightly higher than long. First flagellomere 1.7 times as long as wide.

Thorax black. Scutum brownish pruinose; proepisternum subshining but near ventral margin whitish-grey pruinose; proepimeron shining but along ventral margin silvery-grey pruinose; anepimeron and metepisternum subshining, but anepisternum with a stripe of greyish pruinosity along posterior margin; katapisternum with dense silvery pruinose upper posterior corner, otherwise shiny; meron

weakly grey pruinose but with a big subshining spot; katatergite and anatergite weakly grey pruinose; mediotergite shining but greyish pruinose along lateral margins.

Coxae and femora of all legs dark brown to black, only hind femur at base as well as ventral, anterior, and posterior surfaces at apex of mid and hind femora yellow; fore tibia and tarsi of all legs yellow, only tarsomeres 4 and 5 black. Male mid tibia dark brown in upper third, below yellow, but anterior and posterior surfaces dark brown; apex black, with a white ring in the upper part, and further upwards with a dark brown semi-ring, open on dorsal surface. Mid tibia of female with neither black nor white rings, nor dark brown semi-ring at apex; dorsal and ventral surfaces yellow, only basally dark brown as well as anterior and posterior surfaces. Fore coxa with a strong dorsal bristle near apex; male foreleg modified as in Figs. 168-172; mid femur with a row of short setulae on basal third of anterior surface; mid tibia only with the following apical bristles: 1 ventral, 2-3 anteroventrals, 2-3 posteroventrals; male anteroventral and posteroventral apical bristles of mid tibia stronger and longer than in female; hind femur and tibia without bristles.

Wing (Fig. 173) clear, with weak brownish tinge, only dark brown in basal costal cell and basal third of costal cell as well as near base of wing; darkened along costal vein between R_{2+3} and M; veins brown.

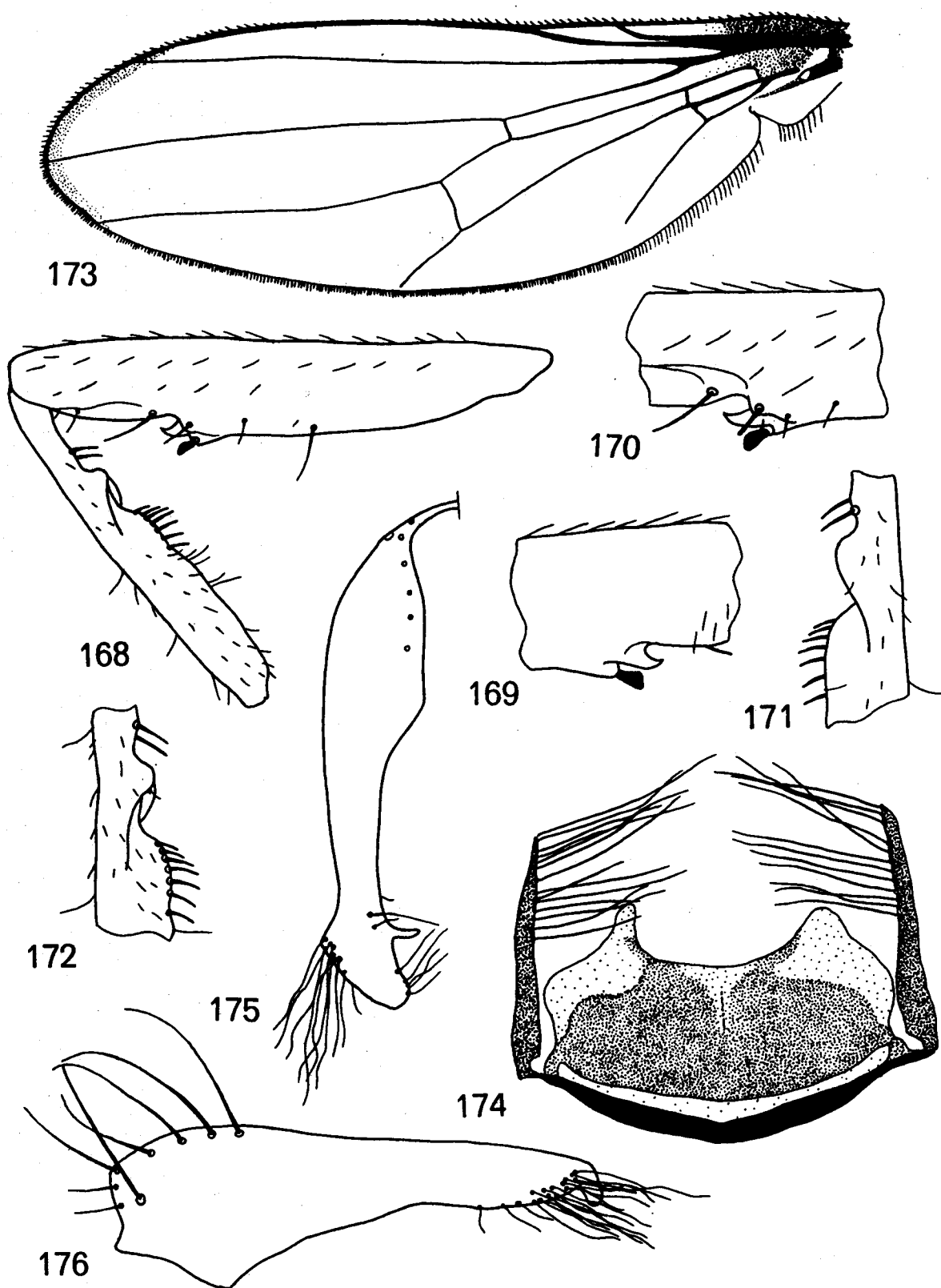
Abdomen subshining, black, without strong bristles, slightly constricted after tergite 1+2; sternite 4 and 5 of male as in Fig. 174. Epandrium and surstyli black; surstyli symmetrical as in Figs. 175, 176.

Length of body: 4.2-5.0 mm. Length of wing: 3.1-3.4 mm.

MATERIAL EXAMINED. TYPE. Holotype, ♂ (AMNH) and 5 paratypes (3 ♂♂, 2 ♀♀: AMNH, ZMUM), labelled "Panama, Barro Colorado Nat. Mon., 20.II-13.III.1985, D.A.Grimaldi". OTHER SPECIMENS. COSTA RICA, province?: "La Suiza", IX.1924 (P.Schild), 1 ♀ (USNM); Cartago: Turrialba, 15-19.VII.1965 (P.J.Spangler), 1 ♀ (USNM); Heredia: "Finca La Tigra", nr. La Vergen, 10 24'N, 84 07'W, 1.III.1985 (A.M.Young), 1 ♂ (USNM). PANAMA, province?: "Cerro Campana", VII.1967 (W.W.Wirth), 3 ♂♂ (USNM); Bocas del Toro: Almirante, 13.X.1932 (F.S.Blanton), 1 ♂ (USNM); Panama: Barro Colorado Isld., 19.VII.1923 (R.C.Shannon), 1 ♀ (USNM).

RANGE. Costa Rica, Panama.

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Figs. 168-176. *Pseudopalaeosepsis nigricoxa*, ♂: 168 - foreleg, posterior view; 169 - fragment of fore femur, anterior view; 170 - same, posterior view; 171 - fragment of fore tibia, anterior view; 172 - same, posterior view; 173 - wing; 174 - abdominal sternites 4 and 5; 175 - epandrium and surstylus, dorsal view; 176 - same, lateral view.

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References

- Becker T. 1919. Dipteres. Brachyceres. // Miss. du Serv. Geogr. de l'Armee, Mesure d'un Arc Merid. Equat. en Amer. du Sud. T.10. Fasc.2. P.163-215. Pls. 14-17.
- Bigot J.M.F. 1857. Dipteros. In: R. de la Sagra: Historia fisica, politica y natural de la Isla de Cuba. T.7. P.328-349. Pl.20 (T.8); also in French edition. P.738-829.
- Bigot J.M.F. 1886. Dipteres nouveaux ou peu connus. 29e partie (suite) XXXVII 2\ e. Essai d'une classification synoptique du groupe des Tanypezidi (mihi) et description de genres et d'especes inedits. // Annls Soc. ent. Fr., (6) No.6. P.369-392.
- Coquillett D.W. 1904. Diptera from southern Texas with descriptions of new species. // Jour. N.Y. ent. Soc. Vol.12. P.31-35.
- Curran C.H. 1927. Four new American Diptera. // Amer. Mus. Novitates. No.275. P.1-4.
- Curran C.H. 1928. Insects of Porto Rico and the Virgin Islands. Diptera or two-winged flies. In: N.Y. Acad. Sci., Sci. Survey Porto Rico and the Virgin Islands. Vol.11. No.1. P.1-118.
- Curran C.H. 1934. The Diptera of Kartabo, Bartica District, British Guiana, with descriptions of new species from other British Guiana localities. // Bull. Am. Mus. nat. Hist. Vol.66. Art.3. P.287-532.
- Duda O. 1926a. Monographie der Sepsiden (Dipt.). I. // Annln Naturh. Mus. Wien. Bd.39 (1925). S.1-153.
- Duda O. 1926b. Monographie der Sepsiden. (Dipt.). II. // Annln Naturh. Mus. Wien. Bd.40. S.1-110.
- Hendel F. 1936. Ergebnisse einer zoologischen Sammelreise nach Brasilien, insbesondere in das Amazonasgebiet, ausgefuhrt von Dr.H.Zerny, X. Teil. Diptera: Muscidae, Acalyptratae (excl. Chloropidae). // Annln Naturh. Mus. Wien. Bd.47. S.61-106.
- Loew H. 1861. Diptera aliquot in insula Cuba collecta. // Wien. Ent. Monatschr. Bd.5. S.33-43.
- Macquart J. 1843. Dipteres exotiques nouveaux ou peu connus. // Mem. Soc. Sci. Agric. Lille. No.1842. P.162-460.
- Melander A.L., Spuler A. 1917. The Dipterous families Sepsidae and Piophilidae. // Bull. Wash. agric. Exp. Stn. Pullman. No.143. 103 pp.
- Ozerov A.L., 1992. The results of the examination of the syntypes of *Sepsis insularis* Williston, 1896 and *Sepsis furcata* Melander et Spuler, 1917 (Diptera Sepsidae). // Russian Entomol. J. (1992). Vol.1. No.2. P.75.
- Ozerov A.L. 1993. Four new synonyms in the family Sepsidae (Diptera). // Revue d'Entomologie de l'URSS. Vol.72. No.1. P.248-249 / In Russian /.
- Ozerov A.L., 1993. Six new species of the genus *Palaeosepsis* Duda (Diptera Sepsidae). // Russian Entomol. J. Vol.2. No.1. P.63-71.
- Schiner J.R. 1868. Diptera. (Art. 1). In: Reise der osterreichischen Fregatte Novara, Zool., Wien. Abt. 1. Sect. B. S. 1-388.
- Seguy E. 1936. Voyage de M.M. L.Chopard et A.Mequignon aux Acores (aout-septembre 1930). X. Dipteres. // Annls Soc. ent. Fr. Vol.105. P.11-26.
- Silva V.C. 1990. Revision of family Sepsidae of the Neotropical Region. I. The genus *Meroplius* Rondani (Diptera, Schizophora). // Revta bras. Ent. Vol.34. No.4. P.709-711.
- Silva V.C. 1991. Levantamento preliminar de Sepsidae (Diptera, Schizophora) em Roraima, projeto Maraca, com descricao de uma especie nova. // Acta Amazonica. No.21. P.369-374.
- Silva V.C. 1992. Revision of family Sepsidae of the Neotropical Region. II. The genus *Meropliosepsis* Duda, 1926 (Diptera, Schizophora). // Revta bras. Ent. Vol.36. No.3. P.549-552.
- Steyskal G.C. 1943. Old World Sepsidae in North America, with a key to the American genera (Diptera). Pan-Pacific Ent. Vol.19. P.93-95.
- Steyskal G.C. 1968. 63. Family Sepsidae. P. 1-6. In: Paravero N. (ed.). A catalogue of the Diptera of the Americas south of the United States. Depart. de Zool., Secretaria da Agricultura, Sao Paulo.
- Thomson C.G. 1869. 6. Diptera. Species nova descripsit. In: K. svenska Fregatten Eugenies Resa. Stockholm, 2 (1) (1868): 443-614.
- Walker F. 1833. Observation on the British species of Sepsidae. // Ent. Mag. No.1. P.244-256.
- Williston S.W. 1896. On the Diptera of St. Vincent (West Indies). // Trans. ent. Soc. London. No.1896. P.253-446. Pls.8-14.