

Plate 1. Diagram of adult female mosquito.

ABBREVIATIONS OF ADULT FEMALE MORPHOLOGY IN PLATES

Plate 2

A - antenna
 C - coxa
 CE - compound eye
 Cl - claw
 Clp - clypeus
 CoF - corneal facet
 Fe - femur
 Fl - flagellum
 Flm - flagellomere
 Fr - frons
 IS - interocular space
 La - labellum

Lb - labium
 MPlp - maxillary palpus
 Occ - occiput
 OL - ocular line
 P - proboscis
 Pe - pedicel
 Plp - palpomere
 Sc - scape
 Ta - tarsus
 Ta_{1,5} - tarsomere
 Ti - tibia
 Tr - trochanter
 V - vertex

Plate 3

Illustrations A and B

AcS - acrostichal setae
 Ap - antepnotum
 ApS - antepnotal setae
 C-I - forecoxa
 Cv - cervix
 DS - dorsocentral setae
 LSS - lateral scutellar setae
 Mpn - mesopostnotum
 MSS - median scutellar setae
 Mtn - metanotum

PeSU - upper proepisternal setae
 Ppn - postpronotum
 PpS - postpronotal setae
 PrA - prescutellar area
 Ps - proepisternum
 SaS - supraalar setae
 Scu - scutum
 SF - scutal fossa
 SFS - scutal fossal setae
 Stm - scutellum
 W - wing.

Illustration C (Wing)

A - anal vein
 A - anal cell
 C - costal vein
 C - Costal cell
 Cu - cubital vein
 Cu₁ - anterior branch of
 cubital vein
 Cu₁ - cubital cell
 Cu₂ - posterior branch of
 cubital vein
 Cu₂ - cubital₂ cell
 FS - fringe scales
 h - humeral crossvein
 M - medial vein
 M - medial cell

M₁₊₂ - anterior branch of
 medial vein
 M₂ - medial₂ cell
 M₃₊₄ - posterior branch
 of medial vein
 M₄ - medial₄ cell
 m-cu - mediocubital crossvein
 R - radial vein
 R - radial cell
 R₁ - anteriormost branch of
 radial vein
 R₁ - radial₁ cell
 R_s - radial sector vein
 R₂ - anterior branch of
 radial sector vein

R_2 - radial₂ cell
 R_{2+3} - connector vein (stem)
of radial sector vein
 R_3 - median branch of
radial sector vein
 R_7 - radial₃ cell

R_{1+5} - posterior branch of
radial sector vein
 R_7 - radial₅ cell
r-m - radiomedial crossvein
Sc - subcostal vein
Sc - subcostal cell

Plate 4

Ab-I - abdominal segment I
AMas - anterior mesanepisternum
Ap - antepnotum
ApS - antepnotal setae
C-I - forecoxa
C-II - midcoxa
C-III - hindcoxa
Ce - cercus
Cv - cervix
DS - dorsocentral setae
H - head
Hl - halter
HyA - hypostigmal area
LSS - lateral scutellar setae
Mam - mesanepimeron
Mem - metameron
MeSL - lower mesanepimeral setae
MeSU - upper mesanepimeral setae
Mks - mesokatepisternum
MkSL - lower mesokatepisternal setae
MkSU - upper mesokatepisternal setae
Mpn - mesopostnotum
MS - mesothoracic spiracle
Msm - mesomeron
MSS - medial scutellar setae

Mtm - metepimeron
Mtn - metanotum
Mtpn - metapostnotum
Mts - metepisternum
MtS - metathoracic spiracle
PA - postspiracular area
PaS - prealar setae
PeSU - upper proepisternal setae
PGL - postgenital lobe
PM - postprocoxal membrane
PMas - posterior mesanepisternum
Ppn - postpronotum
PpS - postpronotal setae
Ps - proepisternum
PS - postspiracular setae
PsS - prespiracular setae
PsA - prespiracular area
S - sternum of abdomen
SA - subspiracular area
SaS - supraalar setae
Scu - scutum
SF - scutal fossa
SFS - scutal fossal setae
Stm - scutellum
Te - tergum of abdomen
W - wing

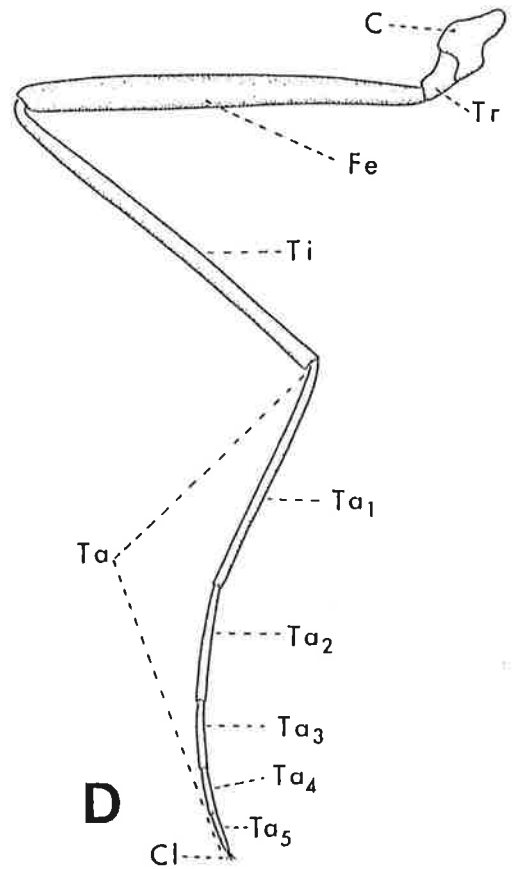
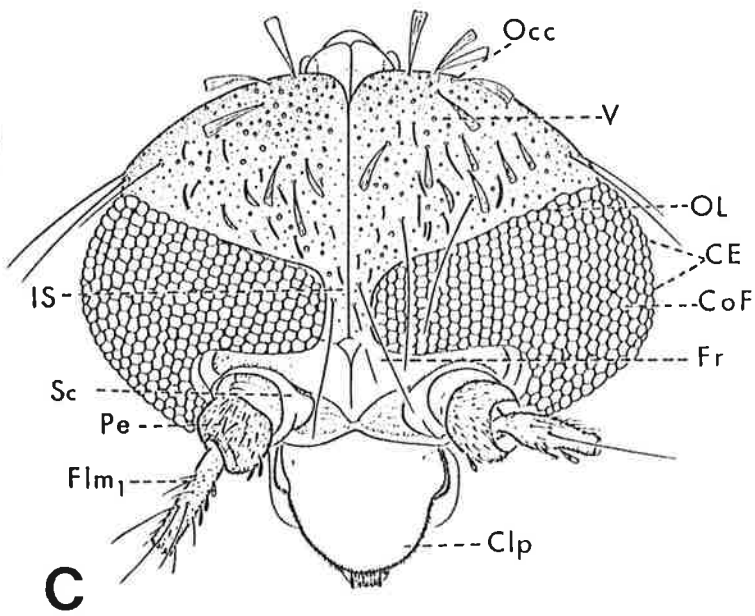
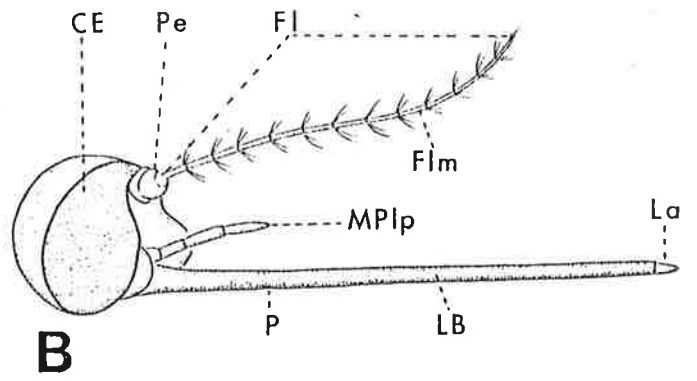
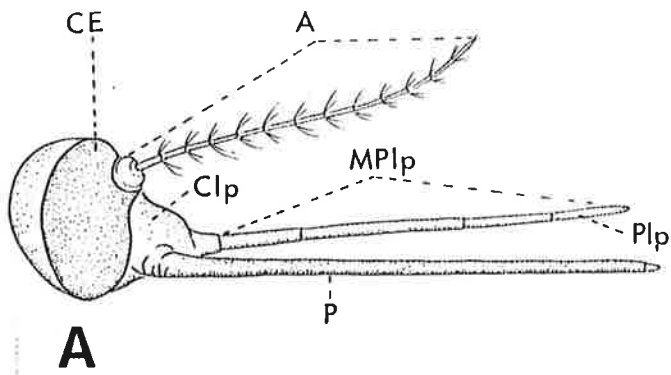


Plate 2. Head and leg of adult female mosquito. A. Lateral view of anopheline head; B. Lateral view of culicine head; C. dorsal view of culicine head; D. lateral view of leg.

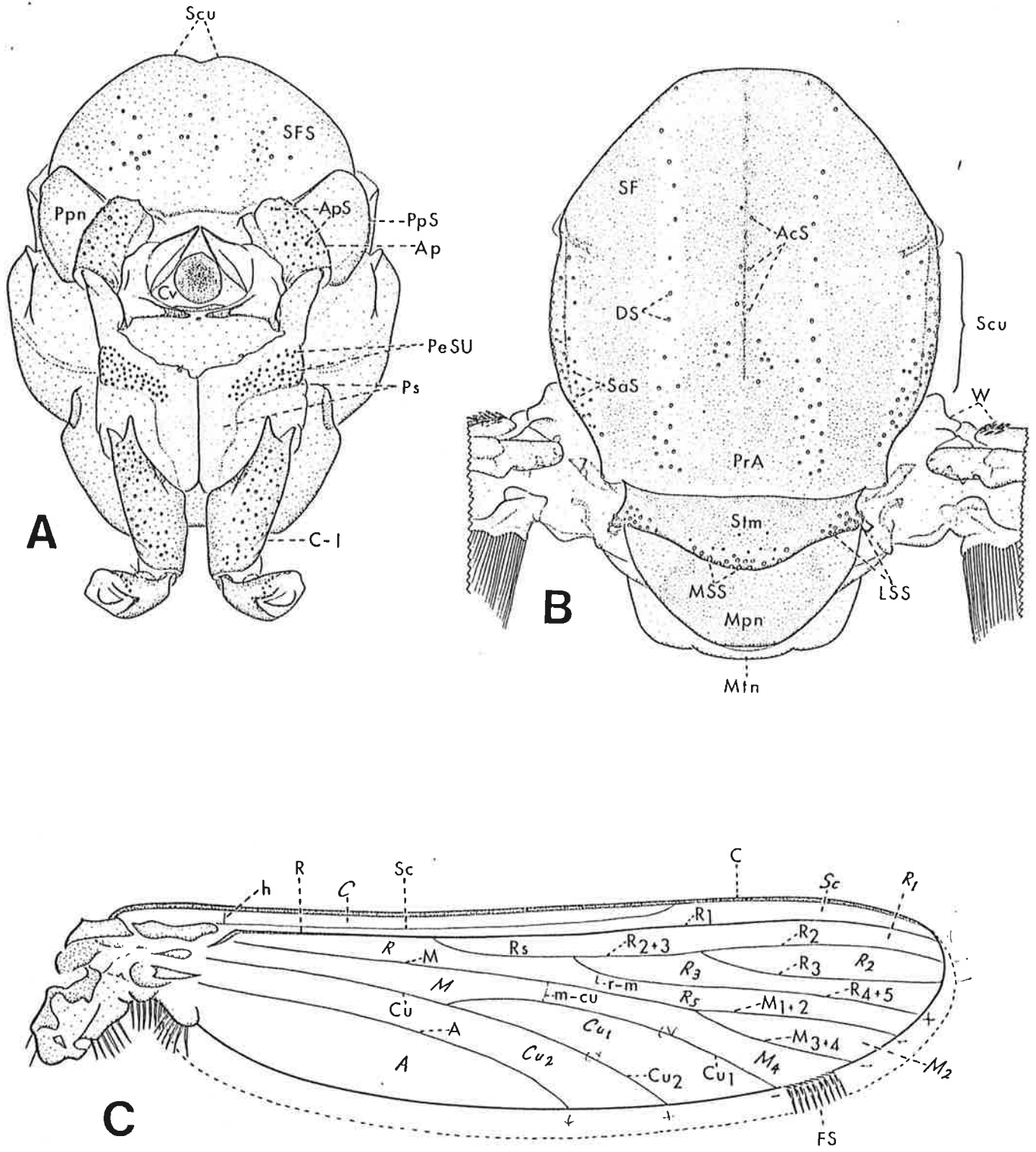


Plate 3. Thorax and wing of adult female mosquito. A. Anterior view of thorax; B. Dorsal view of thorax; C. Dorsal view of wing: longitudinal veins designated by gothic letters, cells by italics.

NOMENCLATURA DAS MANCHAS ALARES

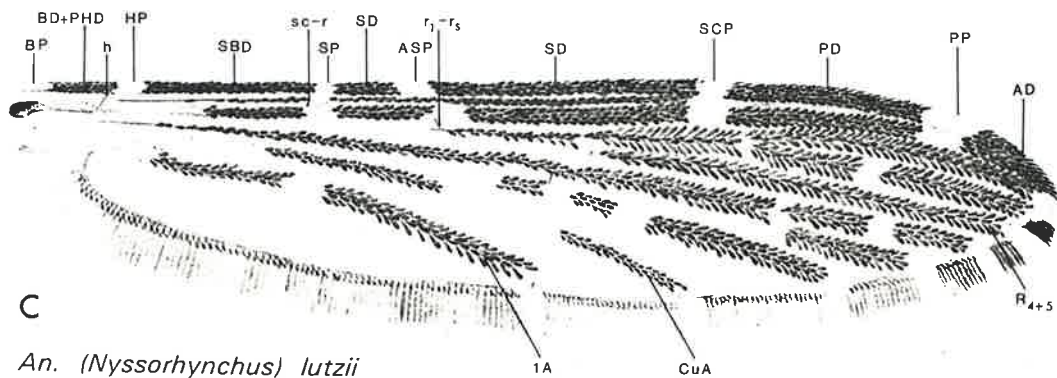
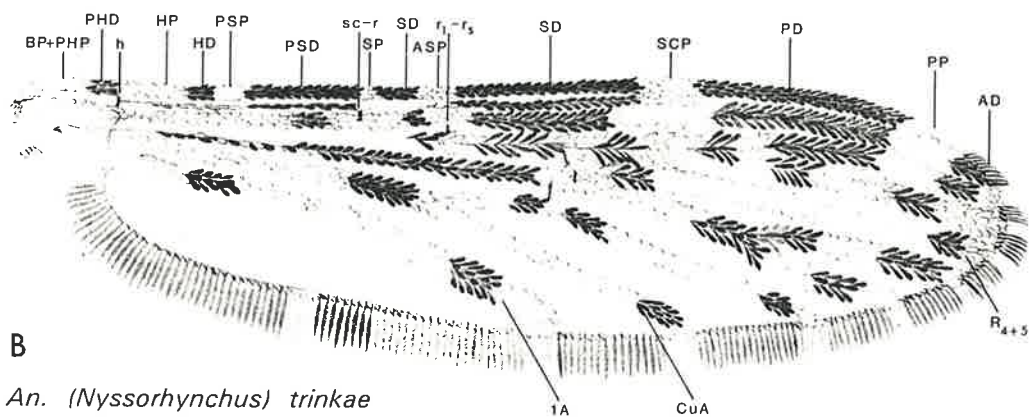
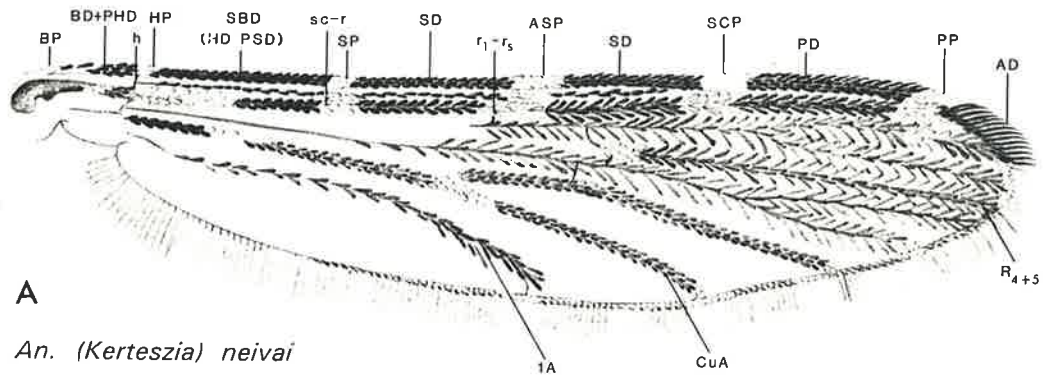


Fig. 2. A.B. From Wilkerson and Peyton 1990; C. Original.

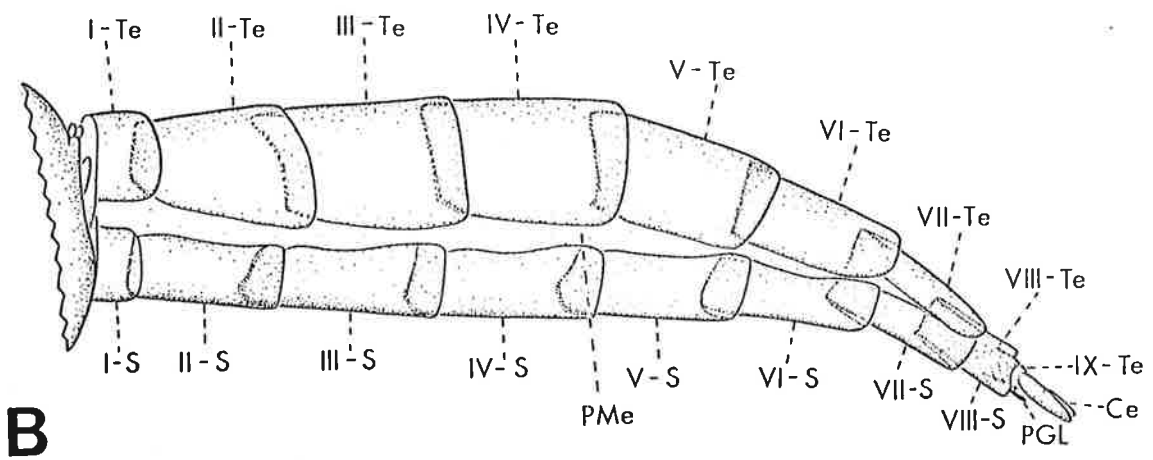
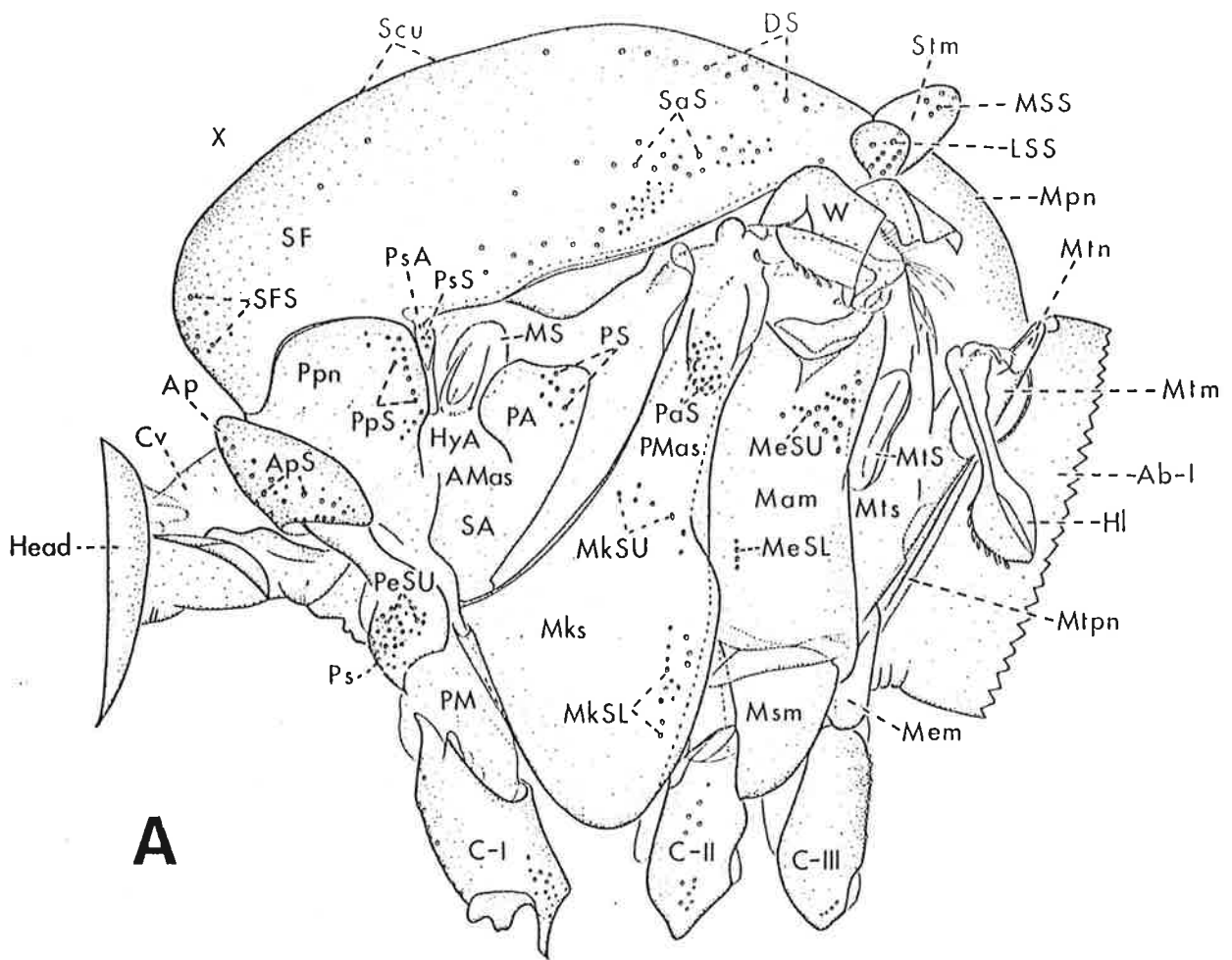


Plate 4. Thorax and abdomen of adult female mosquito. A. Lateral view of thorax; B. Lateral view of abdomen.

MALE

Fig. 1

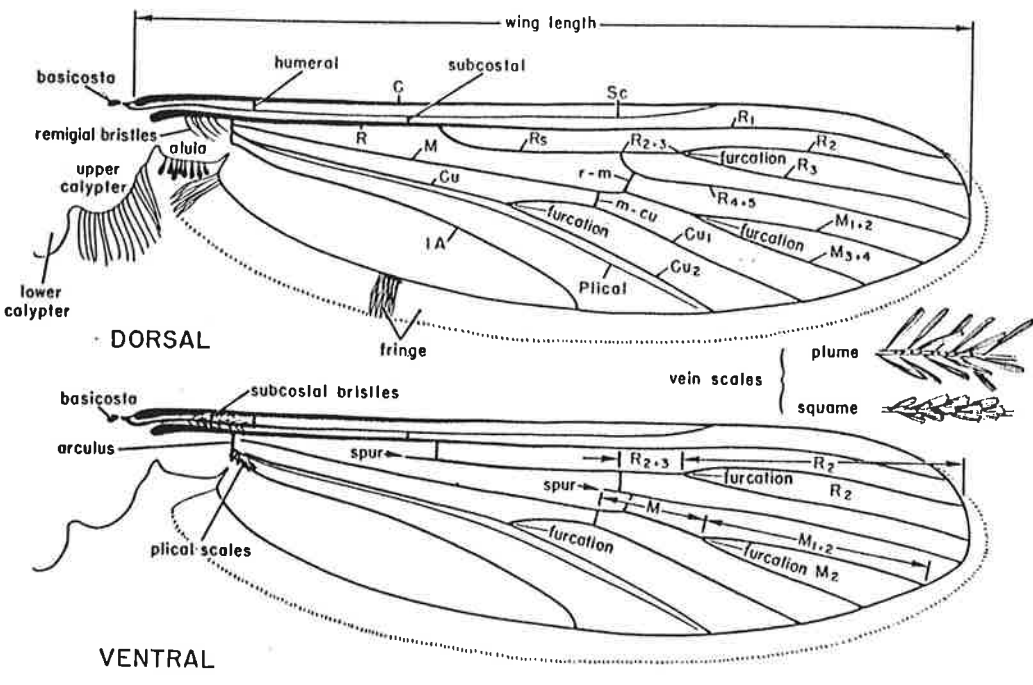
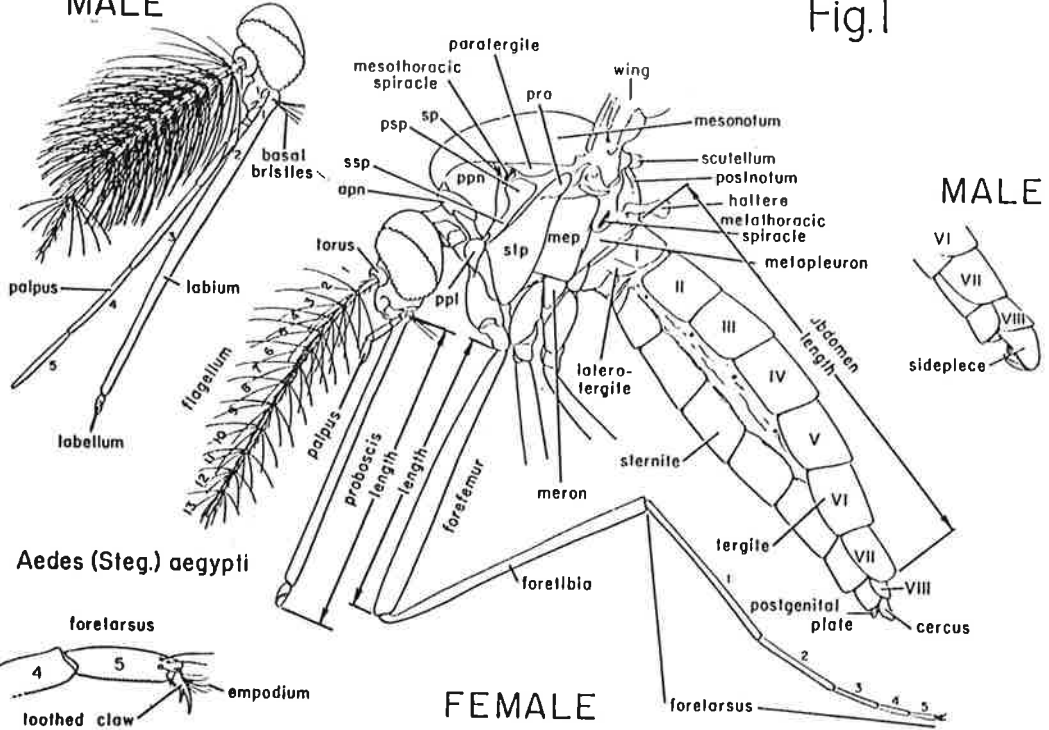
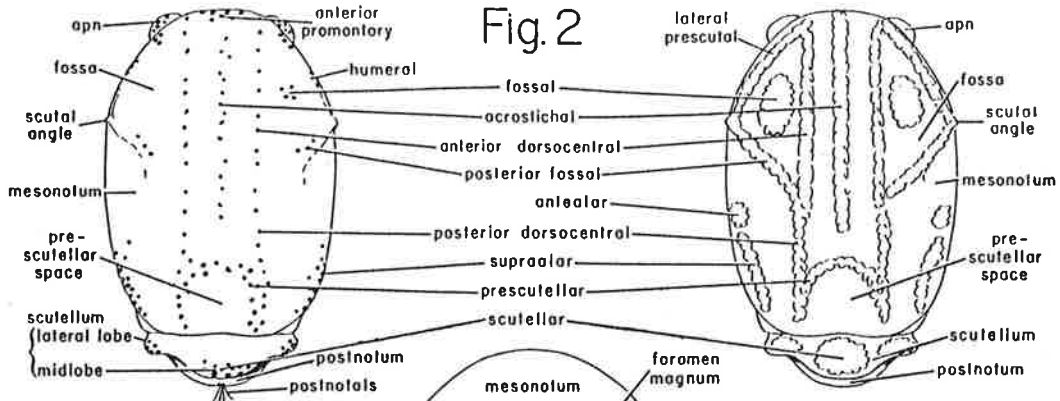
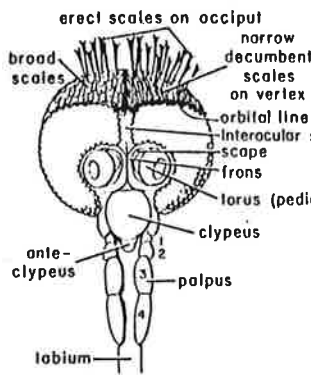


Fig. 2

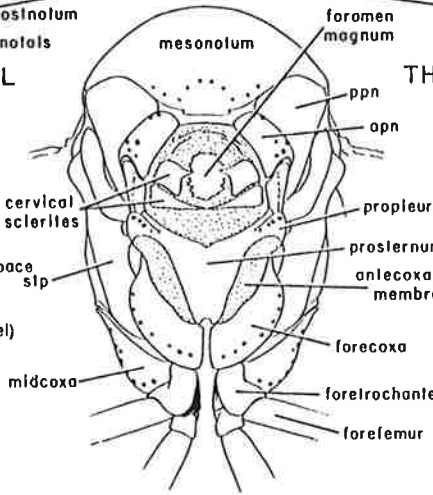


THORAX - DORSAL BRISTLES

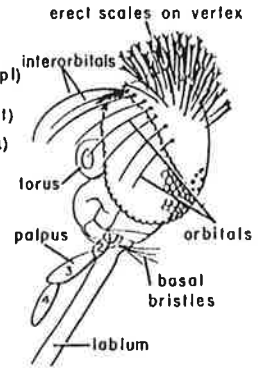
THORAX - DORSAL SCALING



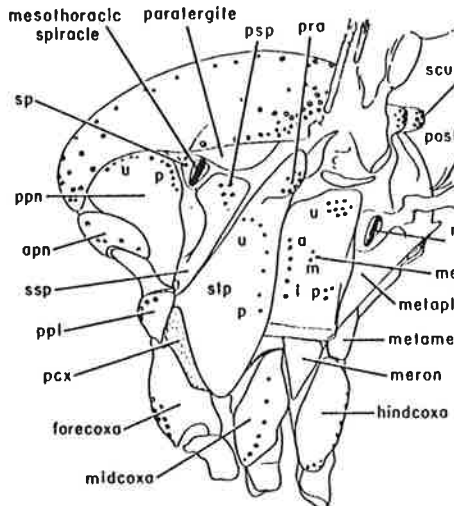
HEAD - ANTERIOR



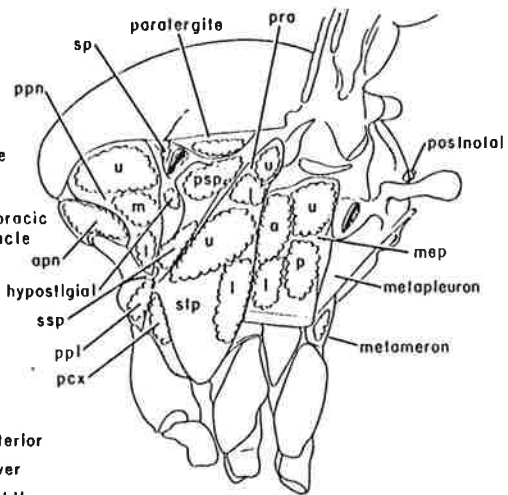
THORAX - ANTERIOR



HEAD - LATERAL



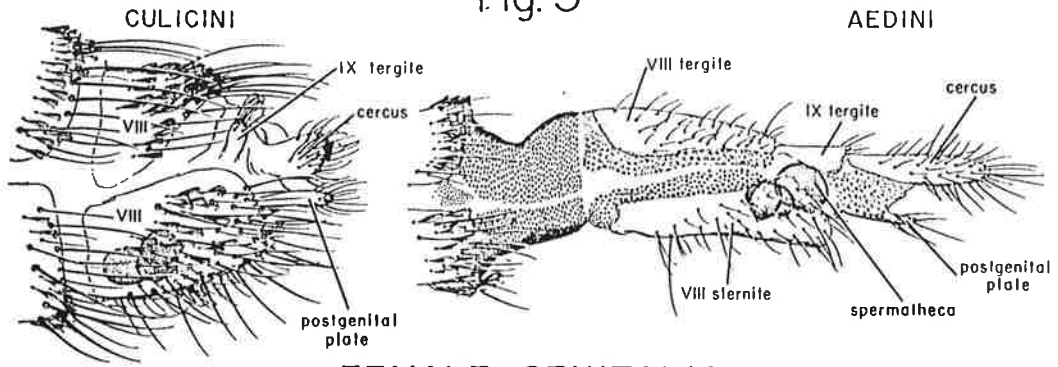
THORAX - LATERAL BRISTLES



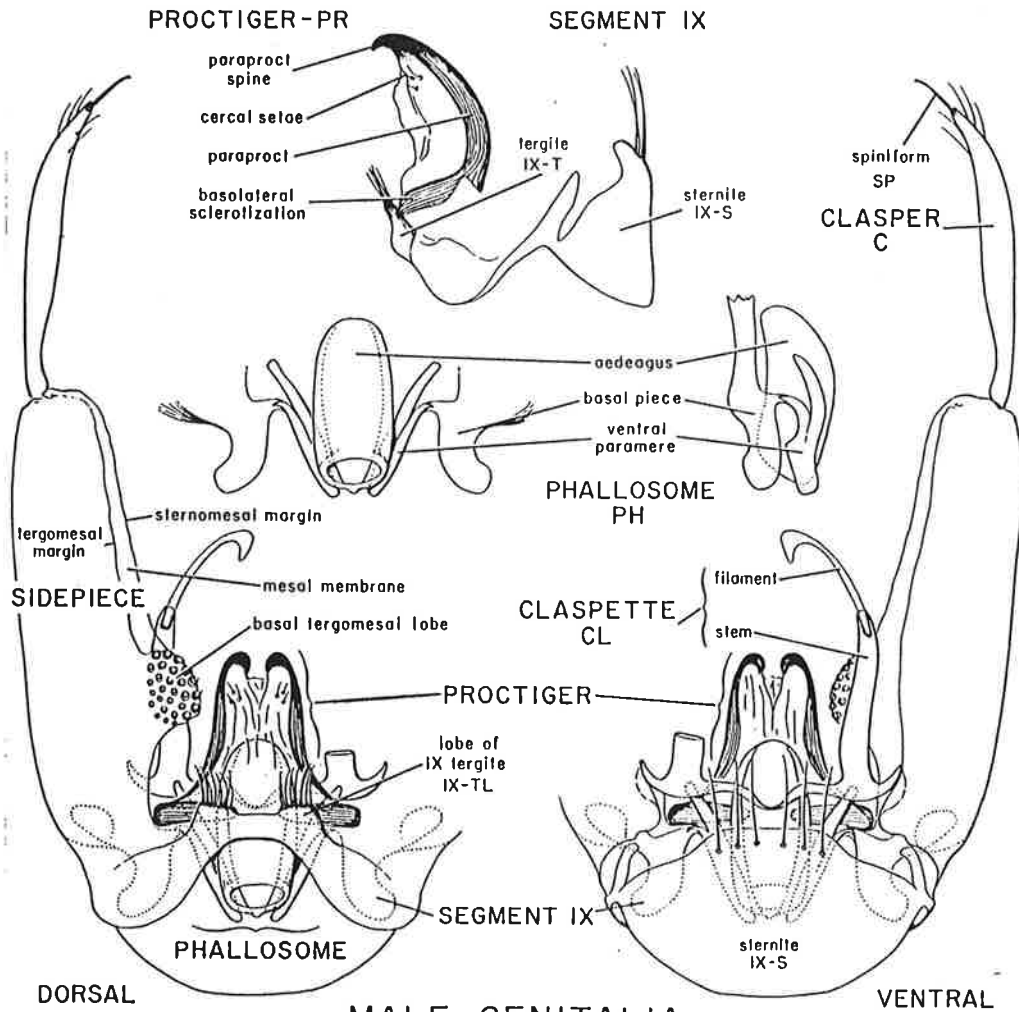
THORAX - LATERAL SCALING

a = anterior
l = lower
m = middle
p = posterior
u = upper

Fig. 3



FEMALE GENITALIA

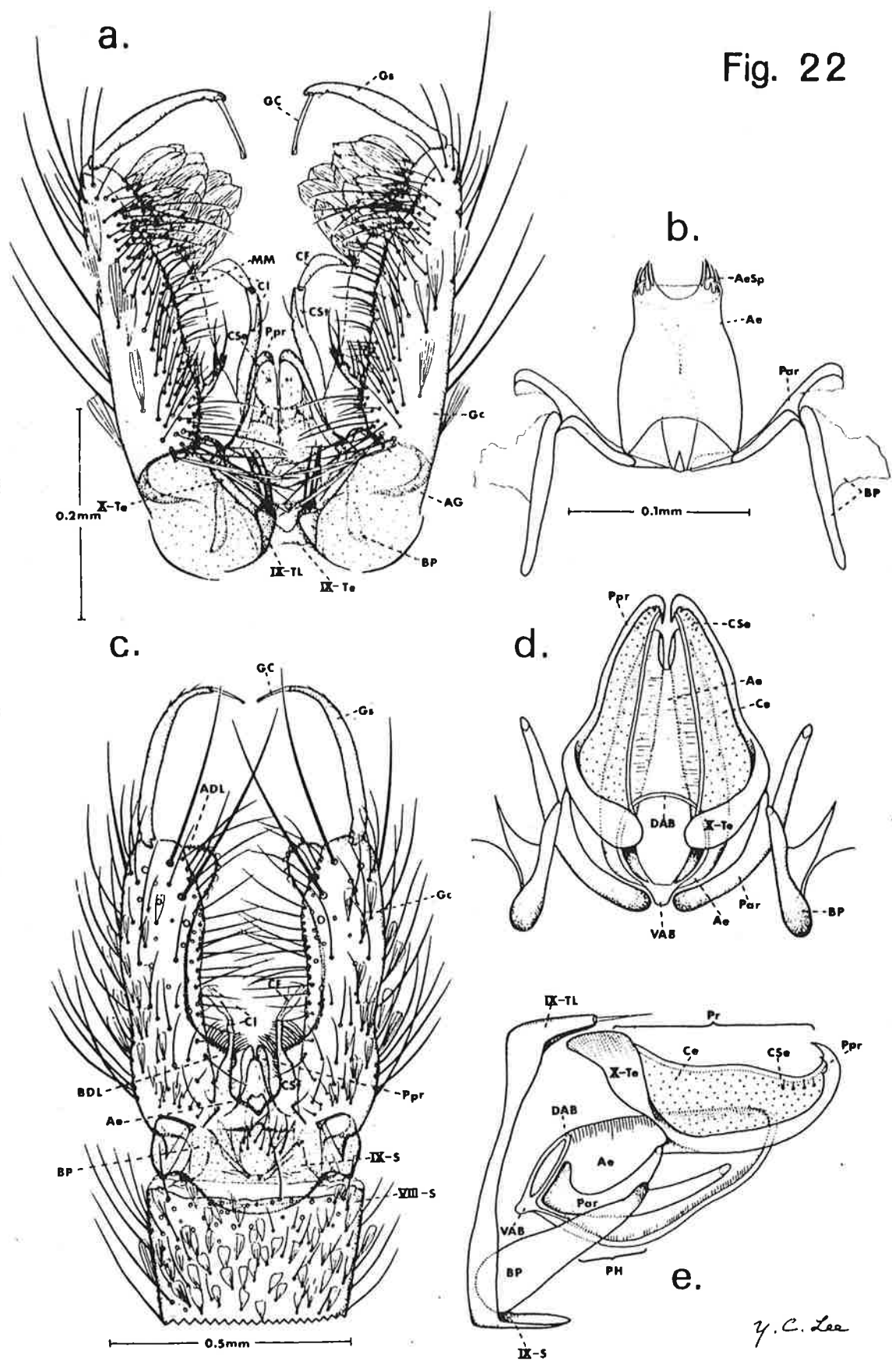


MALE GENITALIA

Abbreviations

ADL	-	apicodorsal lobe
Ae	-	aedeagus
AeSp	-	aedeagal spicule
AG	-	apodeme of gonocoxite
BDL	-	basal dorsomesal lobe
BP	-	basal piece
Ce	-	cercus
CF	-	claspette filament
Cl	-	claspette
CSe	-	cercal seta
CSt	-	claspette stem
DAB	-	dorsal aedeagal bridge
Gc	-	gonocoxite
GC	-	gonostylar claw
Gs	-	gonostylus
MM	-	mesal membrane
Par	-	paramere
PH	-	phallosome
Ppr	-	paraproct
Pr	-	proctiger
VAB	-	ventral aedeagal bridge
VIII-S	-	sternum VIII
IX-S	-	sternum IX
IX-Te	-	tergum IX
IX-TL	-	tergum IX lobe
X-Te	-	tergum X

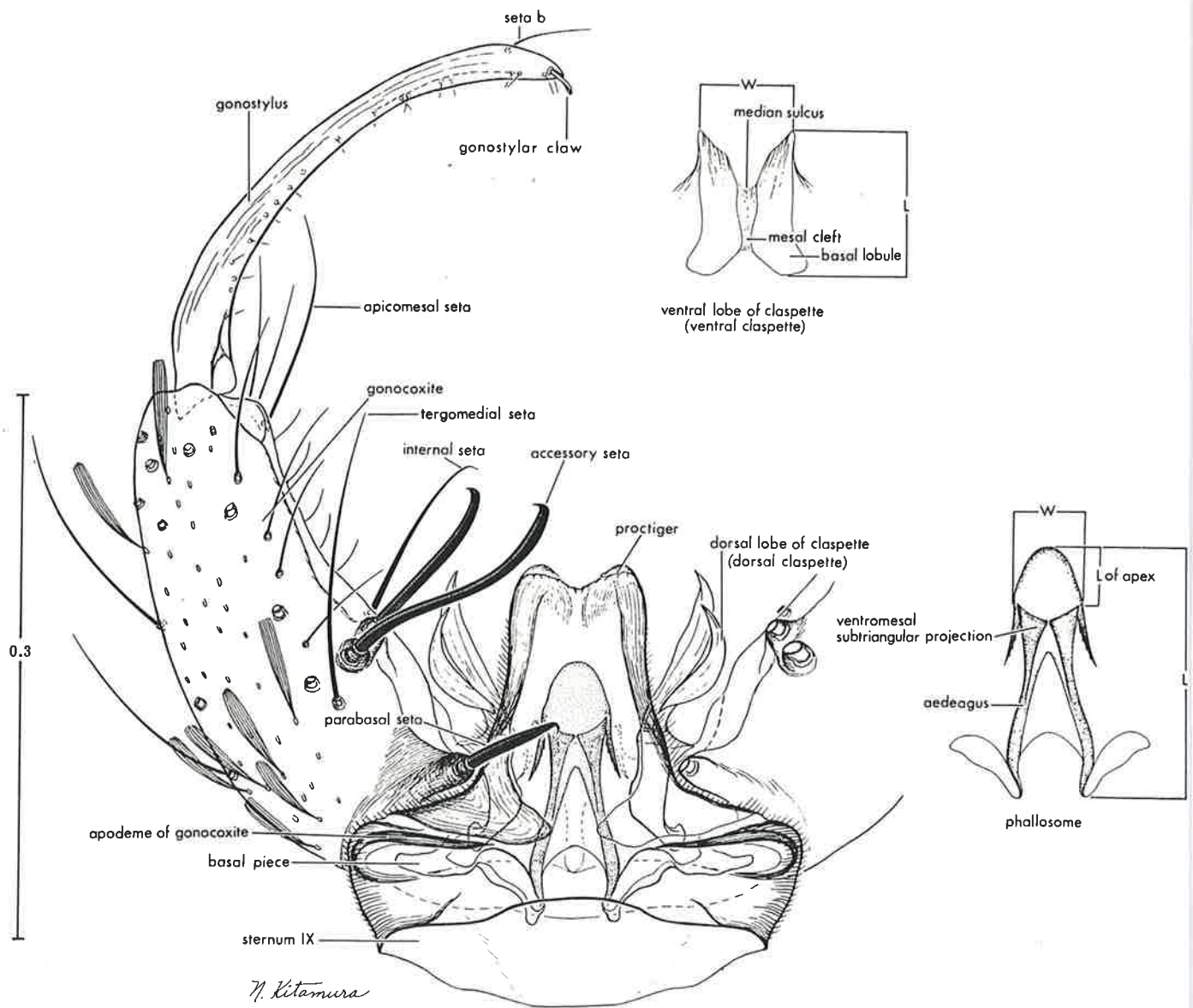
Fig. 22



Y. C. Lee

GENITALIA MASCULINA - ANOPHELES

Fig. 9
NYSSORHYNCHUS



lanei

ESTANCIA
SERGIPE
BRAZIL

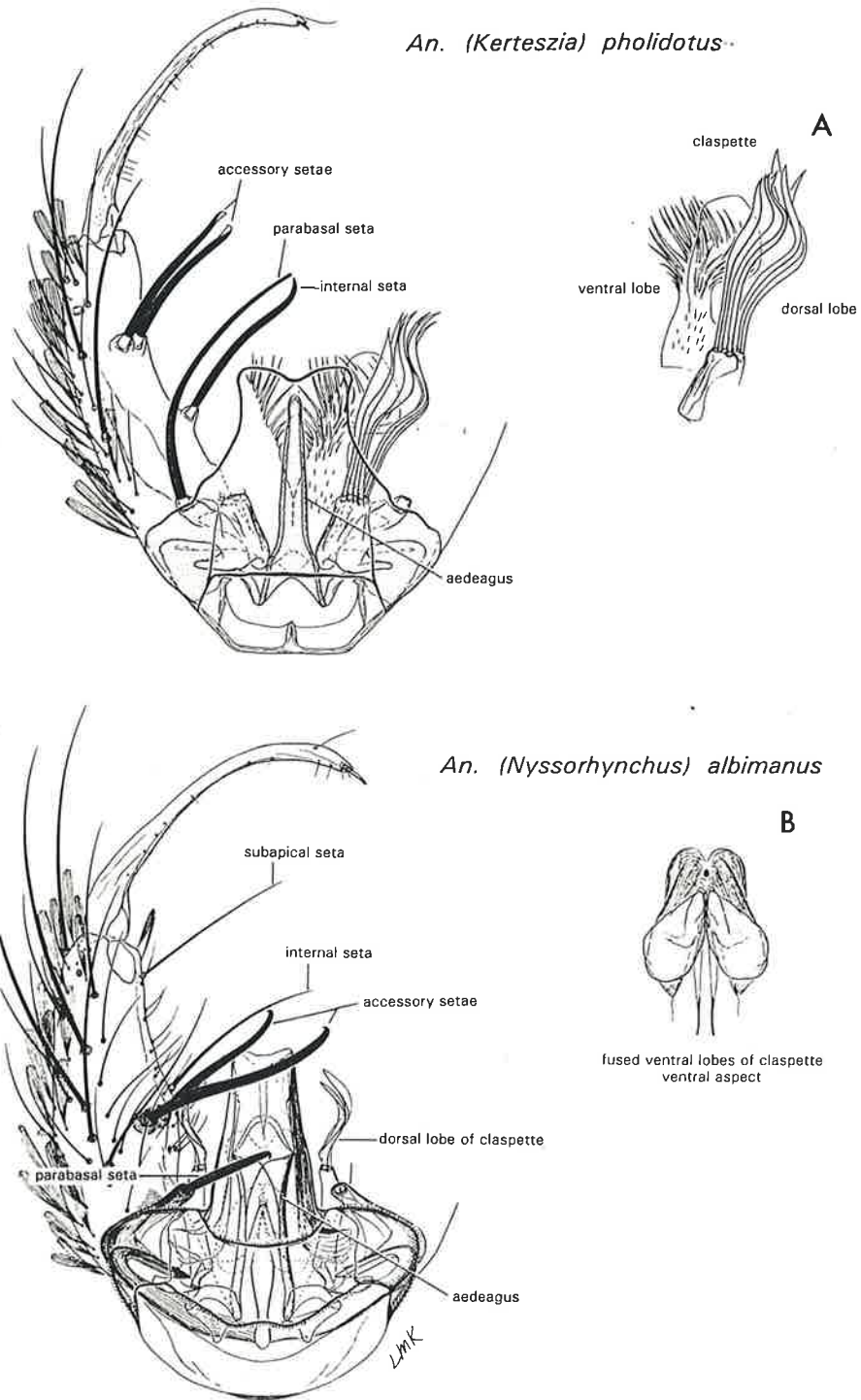


Fig. 3. A. From Zavortink 1973; B. From Faran 1980.

GENITALIA MASCULINA - CULEX

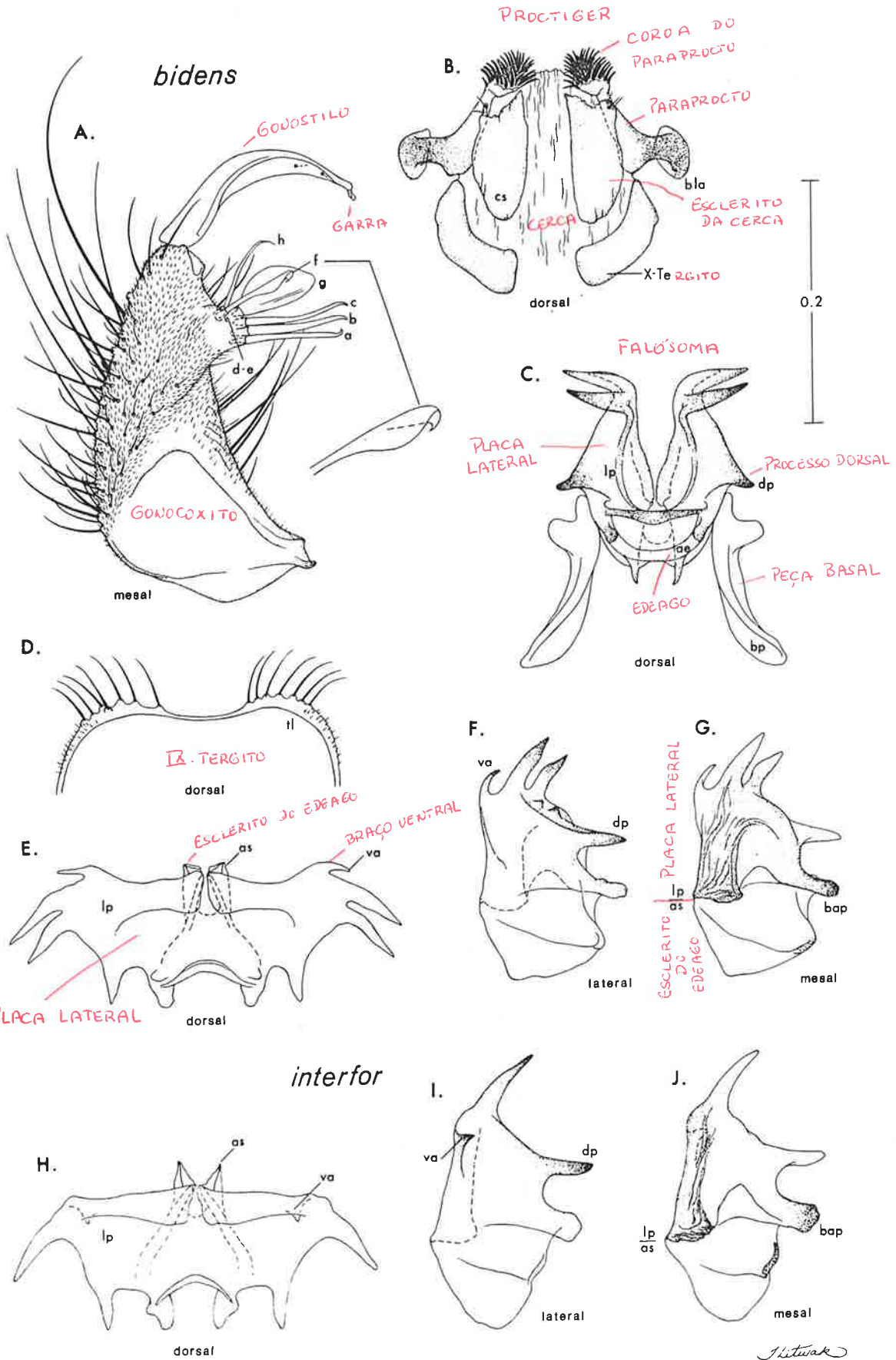
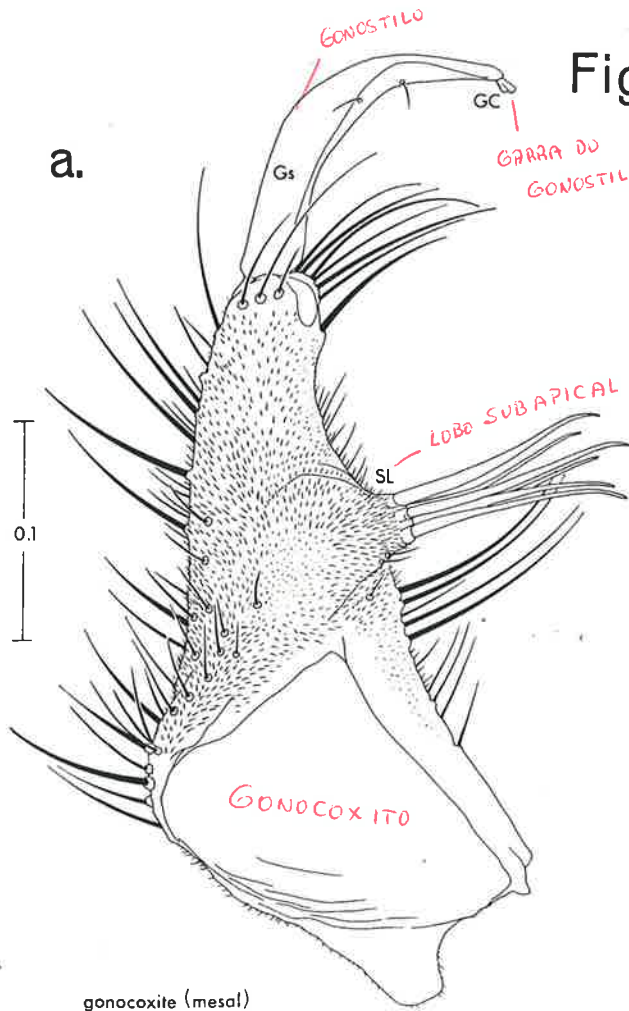
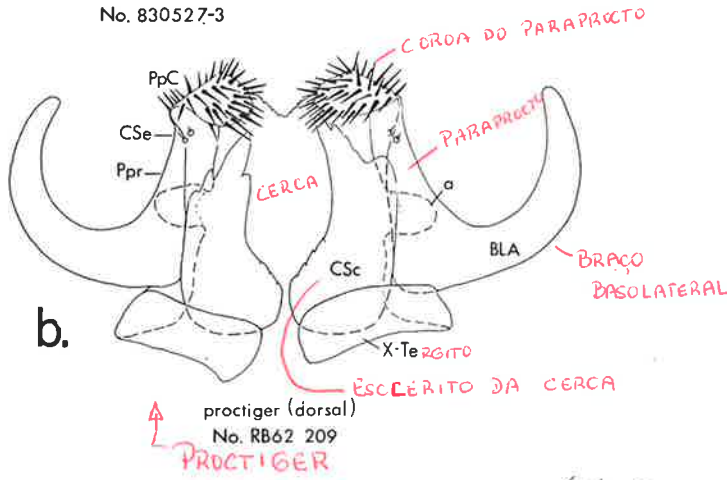


Fig. 2



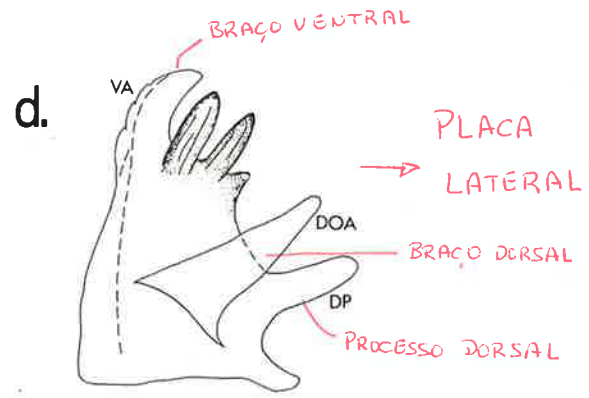
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No. 830527-3



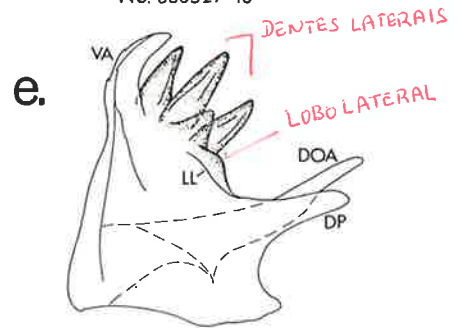
proctiger (dorsal)
No. RB62 209
PROCTIGER



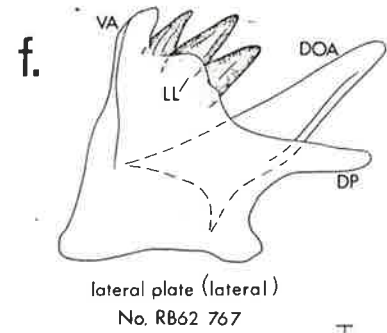
IXth tergal lobes (dorsal)
No. 4503



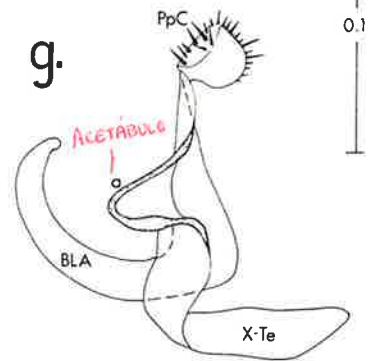
lateral plate (mesal)
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lateral plate (lateral)
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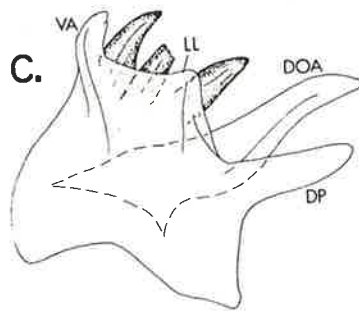
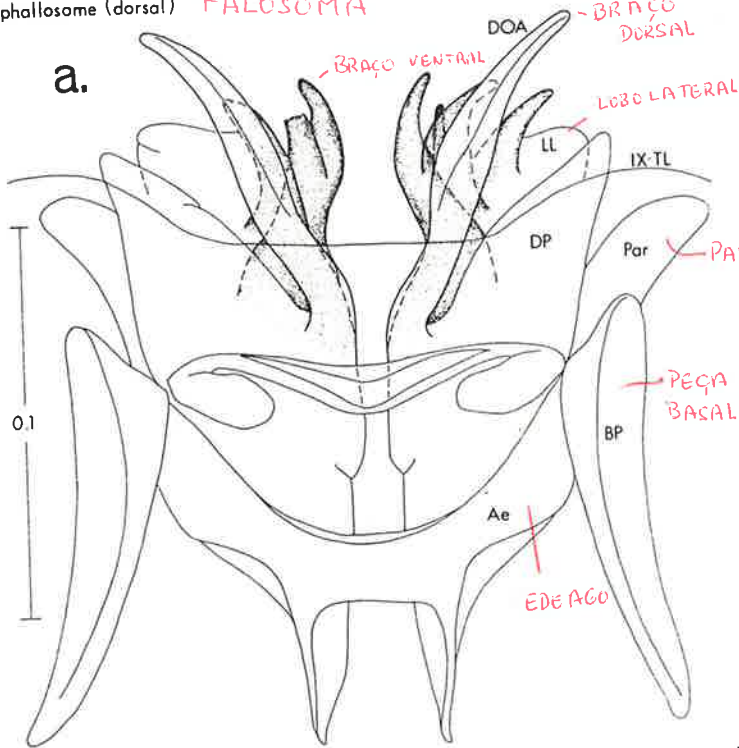
lateral plate (lateral)
No. RB62 767



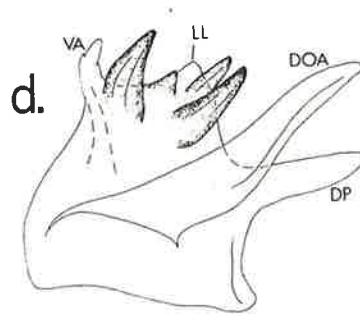
paraproct (ventral)
holotype of *oswaldoi*

Fig. 1

phallosome (dorsal) **FALÓSOMA**



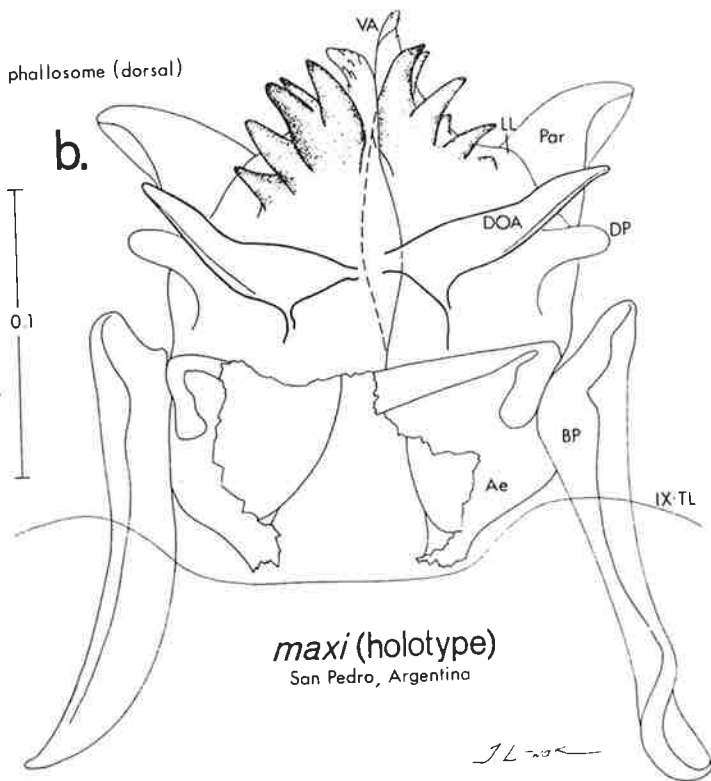
lateral plate (lateral)



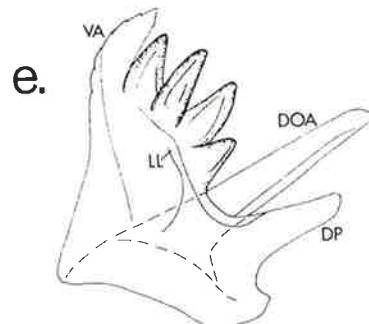
lateral plate (mesal)

oswaldoi (holotype)
Macaíba, Brazil

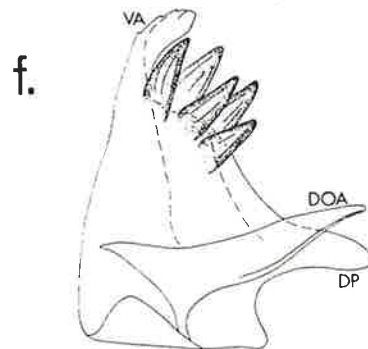
phallosome (dorsal) **FALÓSOMA**



maxi (holotype)
San Pedro, Argentina



lateral plate (lateral)
No. 830506-3



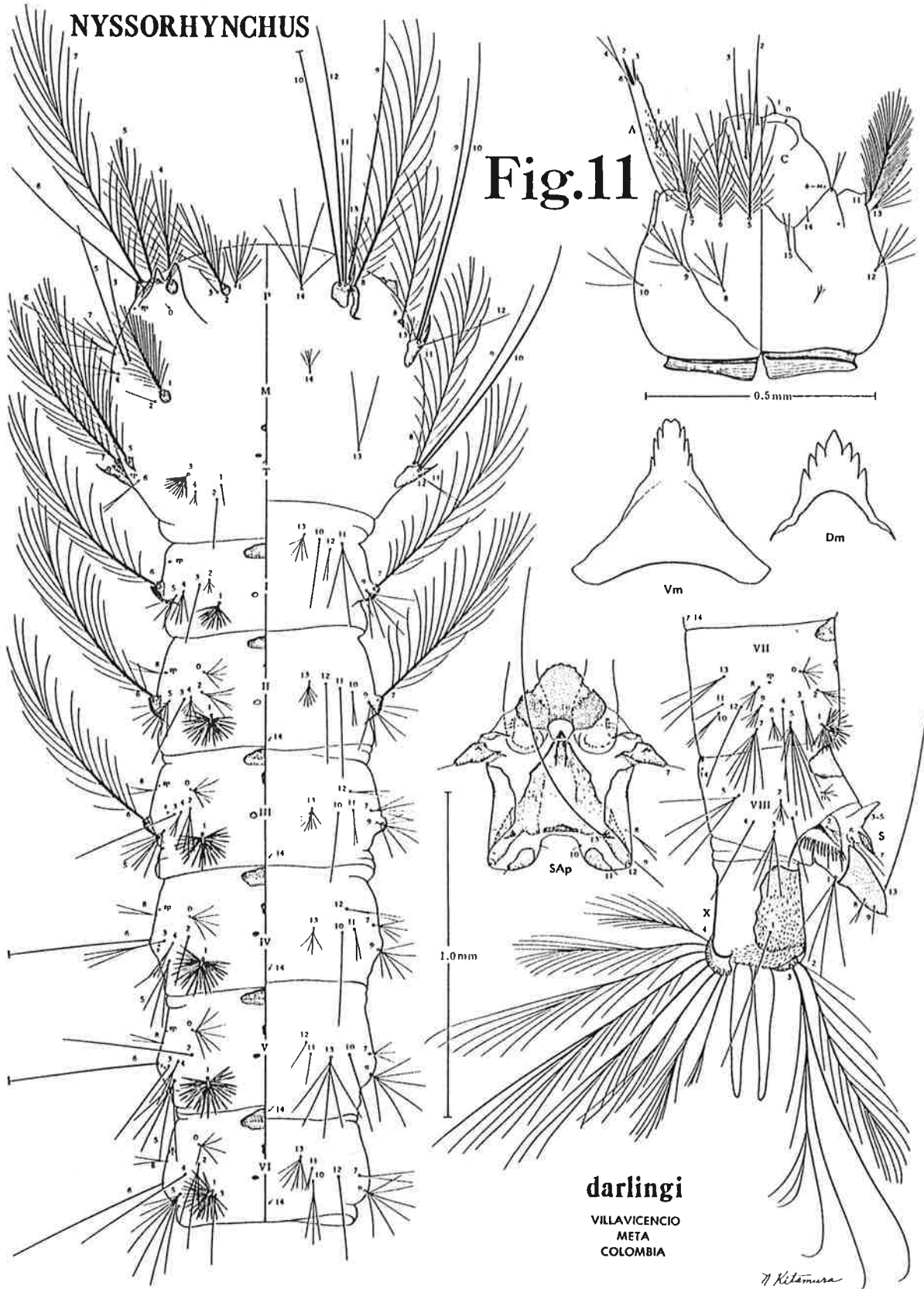
lateral plate (mesal)
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JL-200

LARVA

NYSSORHYNCHUS

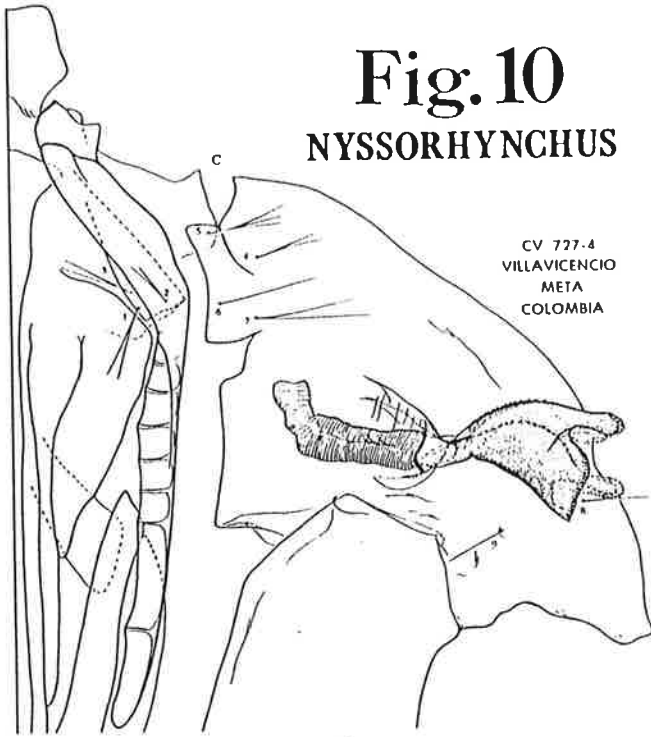
Fig.11



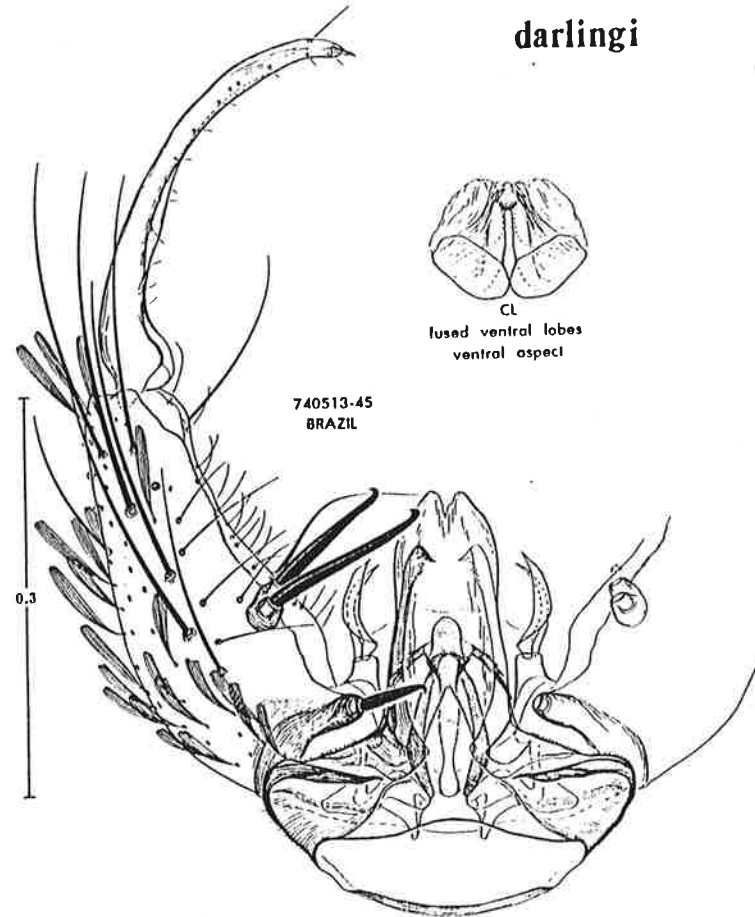
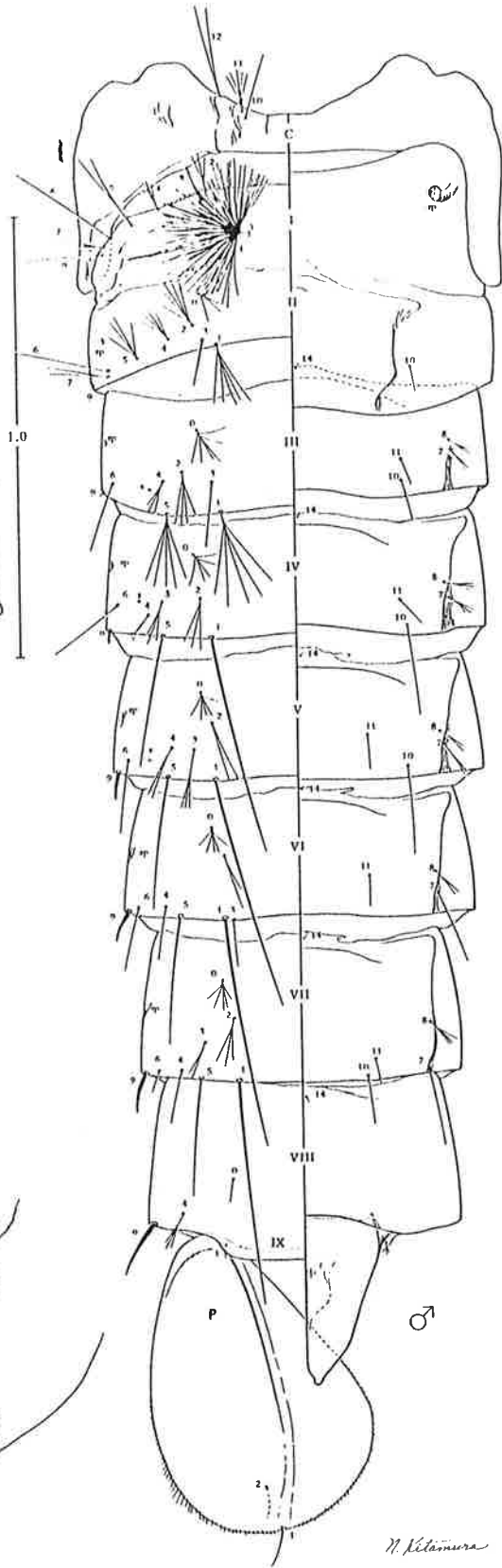
PUPA

Fig. 10 NYSSORHYNCHUS

CV 727-4
VILLAVICENCIO
META
COLOMBIA



darlingi



740513-45
BRAZIL

N. Kitamura

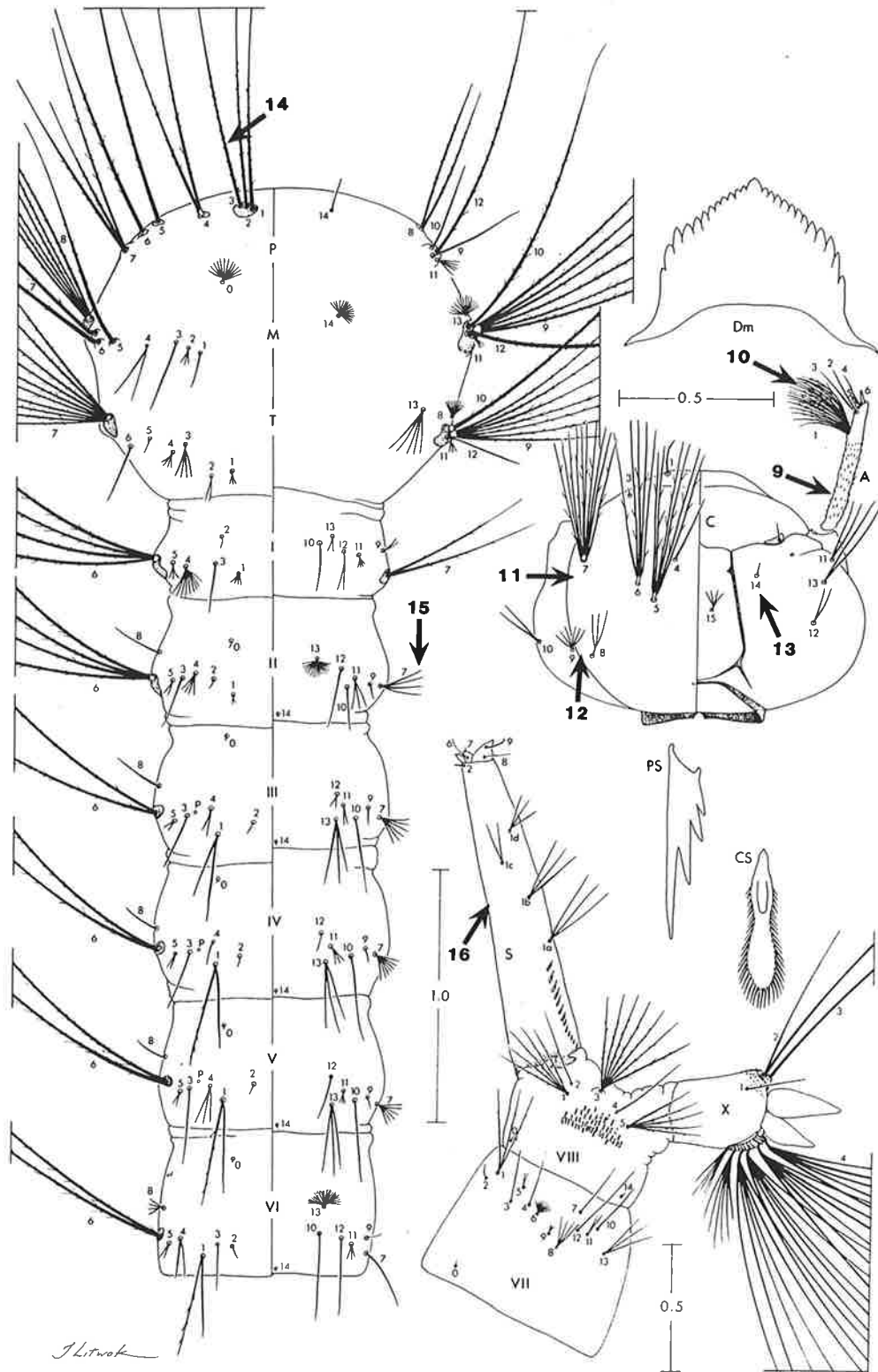
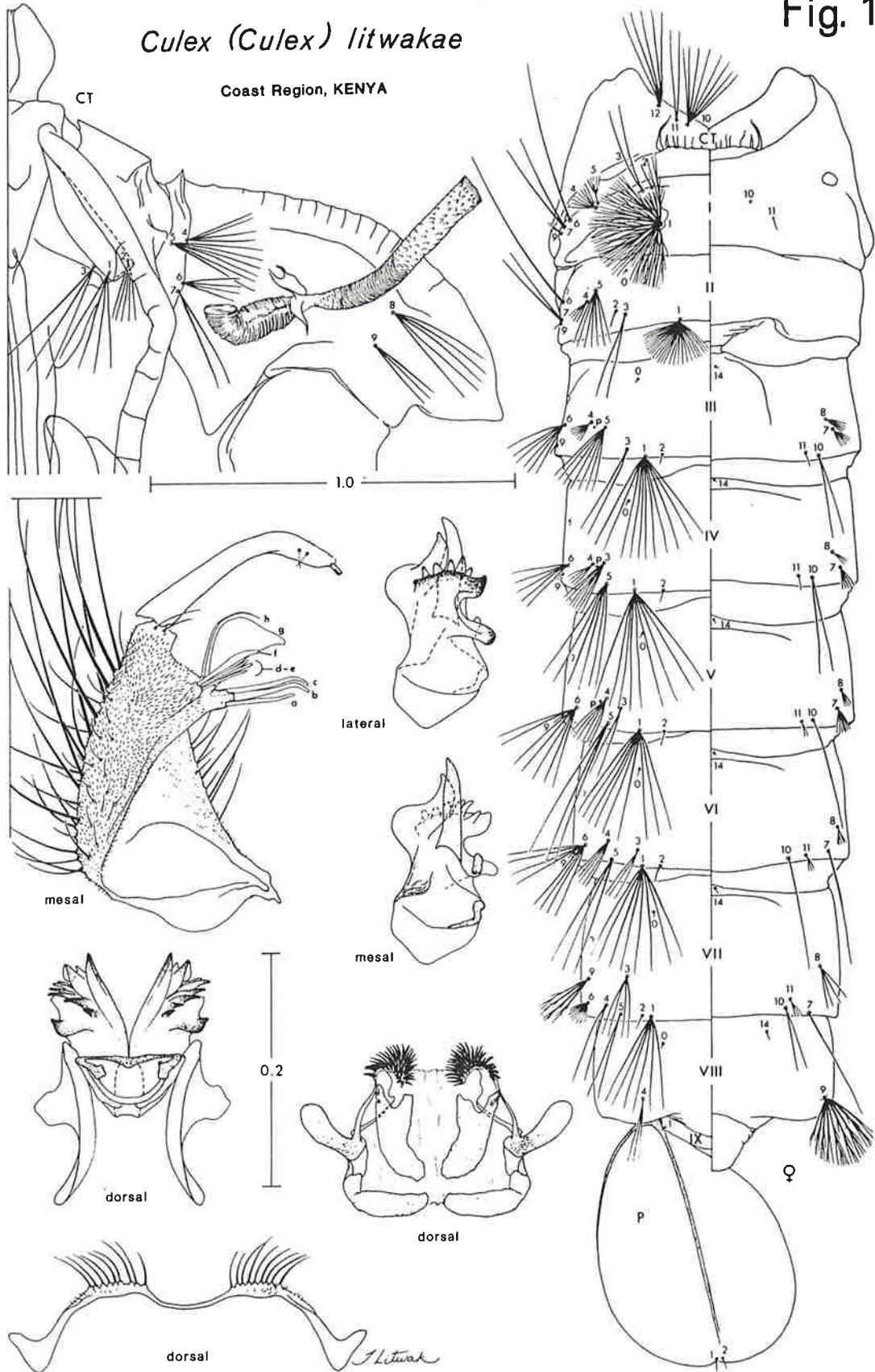


Fig. 5. Larva of *Culex* (*Culex*) *pipiens* (from Harbach 1988). Scales in mm.

Fig. 1



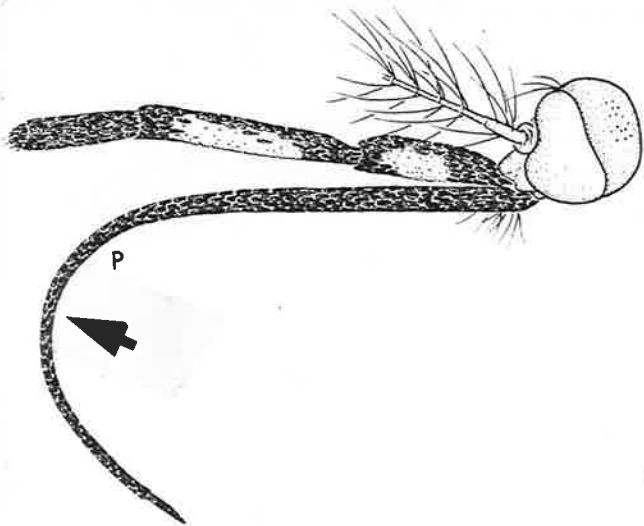
Sistemática de Culicidae
Departamento de Epidemiologia
Faculdade de Saúde Pública
Universidade de São Paulo

Chave para Gêneros de Culicidae
- Adulto fêmea -

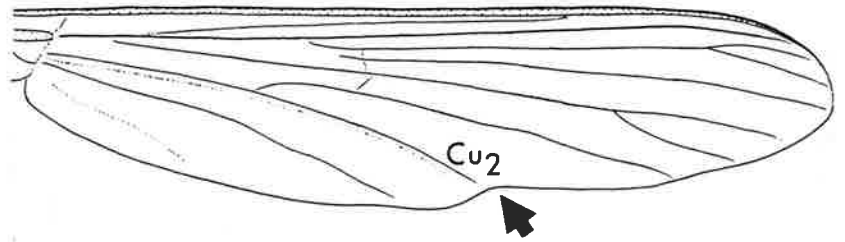
Profa. Maria Anice Mureb Sallum
2005

Fêmeas

- 1). Probóscida, fortemente, curva para baixo; margem posterior da asa, côncava junto do extremo da veia Cu₂ *Toxorhynchites* ✓

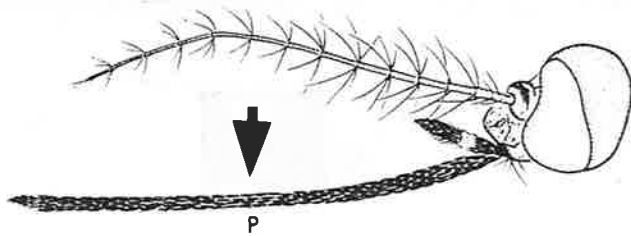


Lateral view of head - Tx. r. septentrionalis

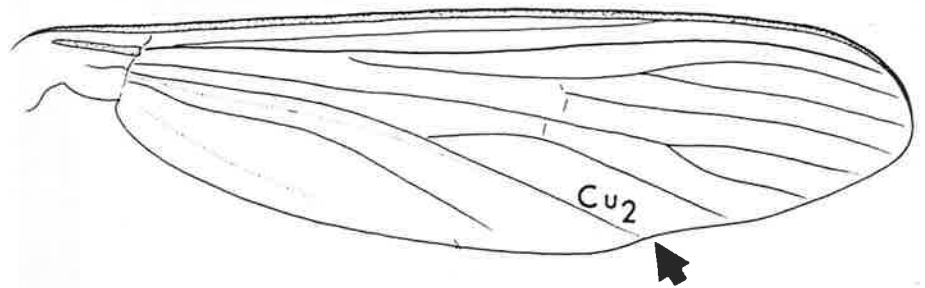


Dorsal view of wing - Tx. r. septentrionalis

- Probóscida mais ou menos reta; margem posterior da asa, reta ou ligeiramente côncava 2 ✓

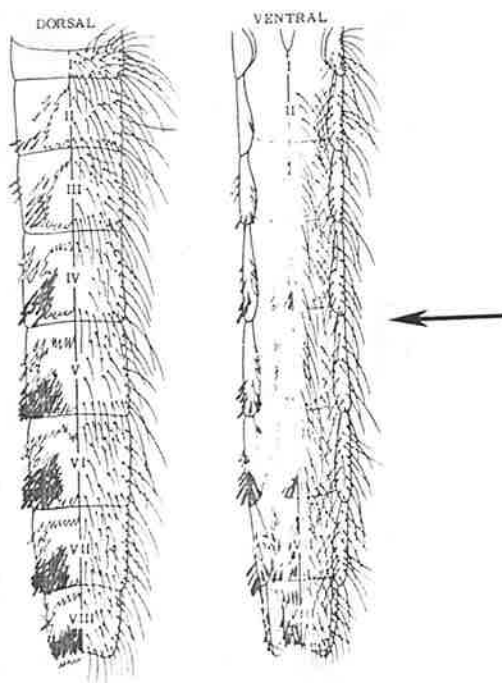


Lateral view of head - Ae. vexans



Dorsal view of wing - Ae. vexans

2 (1) Esternitos abdominais e, geralmente, os tergitos, com poucas escamas ou mesmo sem elas 3 ✓

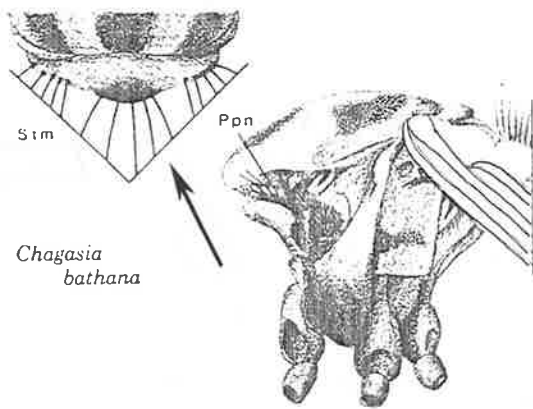


Esternitos e tergitos abdominais com cobertura densa e uniforme de escamas .. 4 ✓

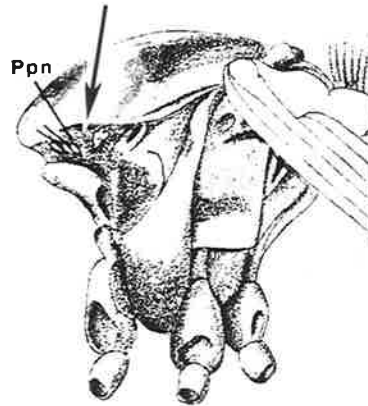


- Dorsal view of abdomen - *Ae. vexans*

3 (2). Margem posterior do escutelo, trilobada, com grupos de cerdas em cada lobo; cerdas pronotais posteriores, presentes..... ^{; paratagito com escamas} *Chagasia* ✓

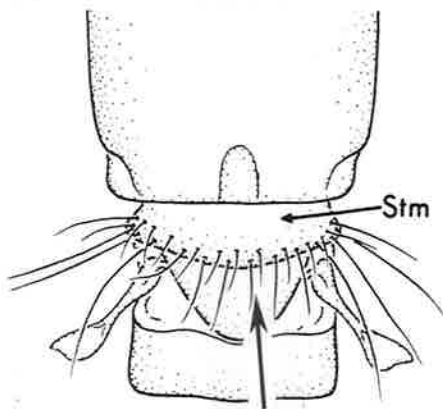


Chagasia bathana

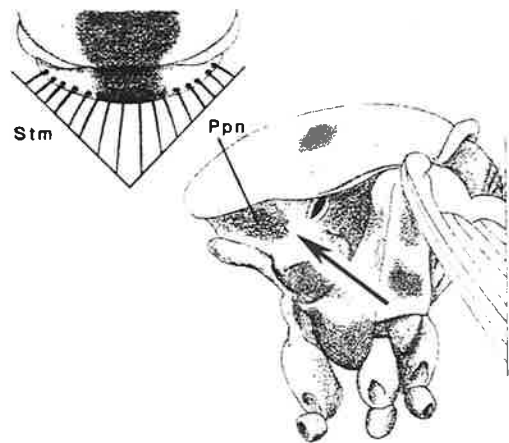


Margem posterior do escutelo, arredondada, cerdas distribuídas

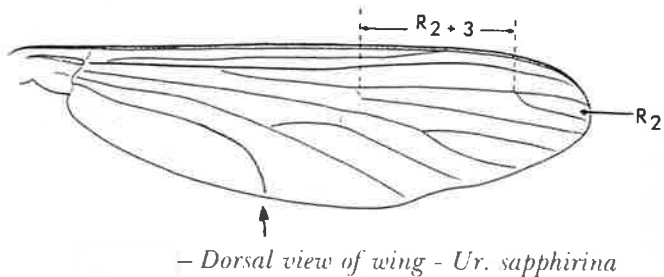
uniformemente; cerdas pronotais posteriores, ausentes..... ^{; paratagito sem escamas} *Anopheles* ✓



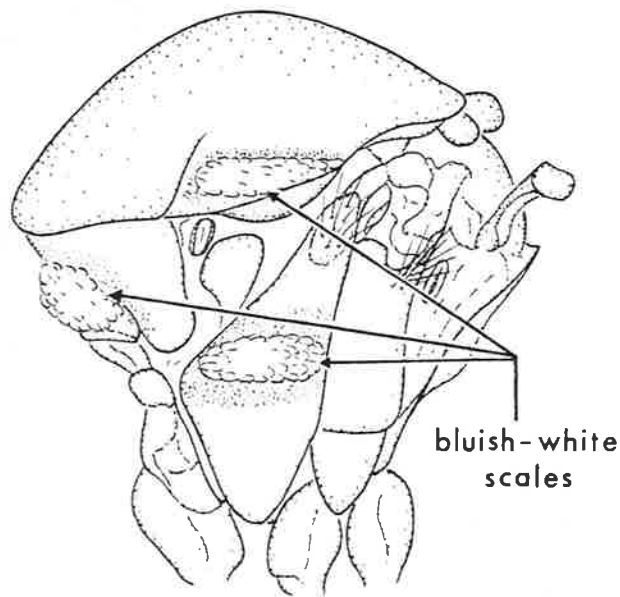
Posterior dorsal view of thorax - *An. quadrimaculatus*



4 (2). Veia ~~anal~~ ^A1/A, curta, infletindo-se e terminando ao nível, ou antes, da bifurcação das veias ^ACu₁ e ^ACu₂; tórax, geralmente, com linhas de escamas azuladas.....*Uranotaenia*

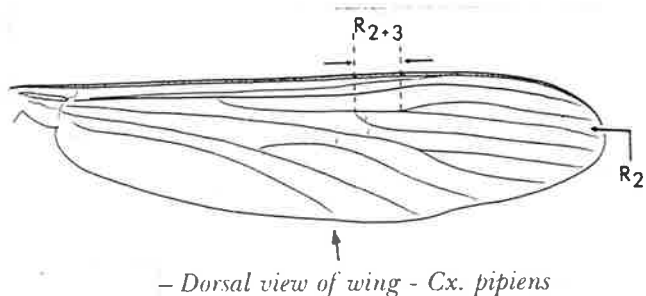


- Dorsal view of wing - *Ur. sapphirina*

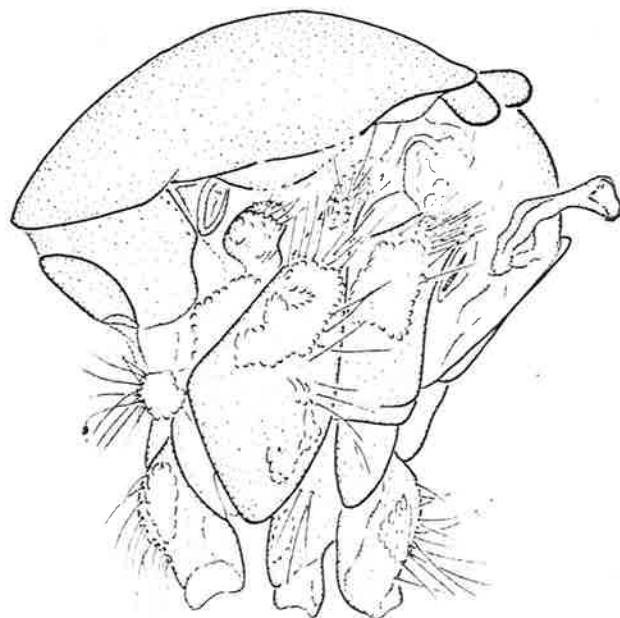


- Lateral view of thorax - *Ur. sapphirina*

Veia ~~anal~~ ^A1/A terminando além da bifurcação das veias ^ACu₁ e ^ACu₂; tórax sem linhas de escamas azuladas.....5

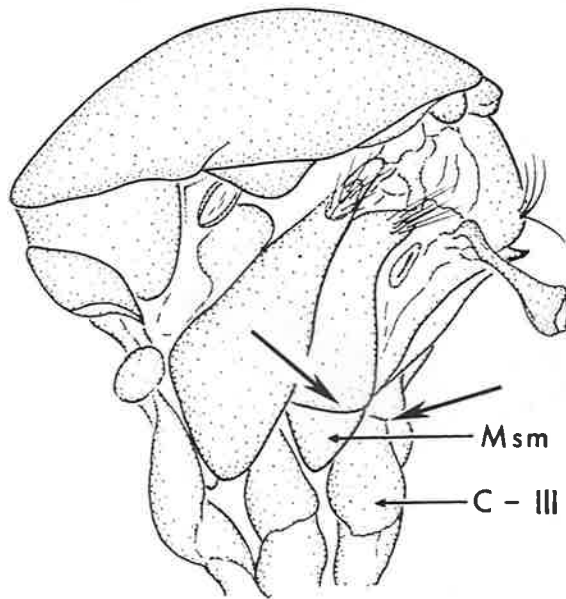


- Dorsal view of wing - *Cx. pipiens*



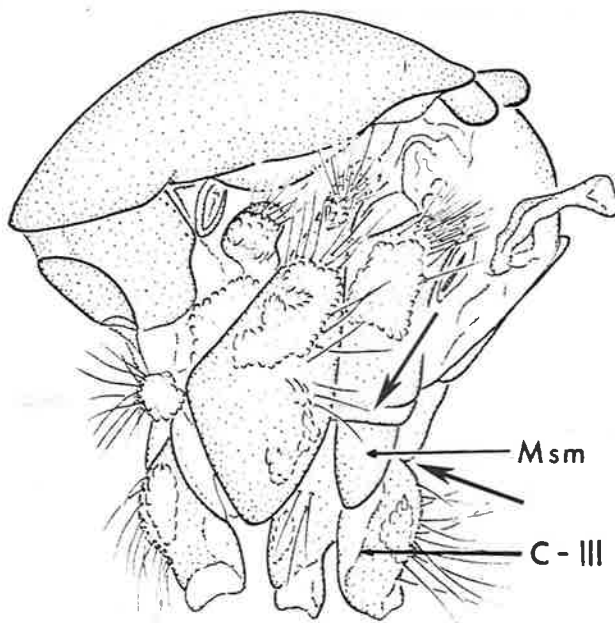
- Lateral view of thorax - *Ae. vexans*

5 (4). Base da coxa posterior implantando-se aproximadamente, ou ao mesmo nível da margem superior do mesômero; mesômero ~~muito~~ pequeno..... 6



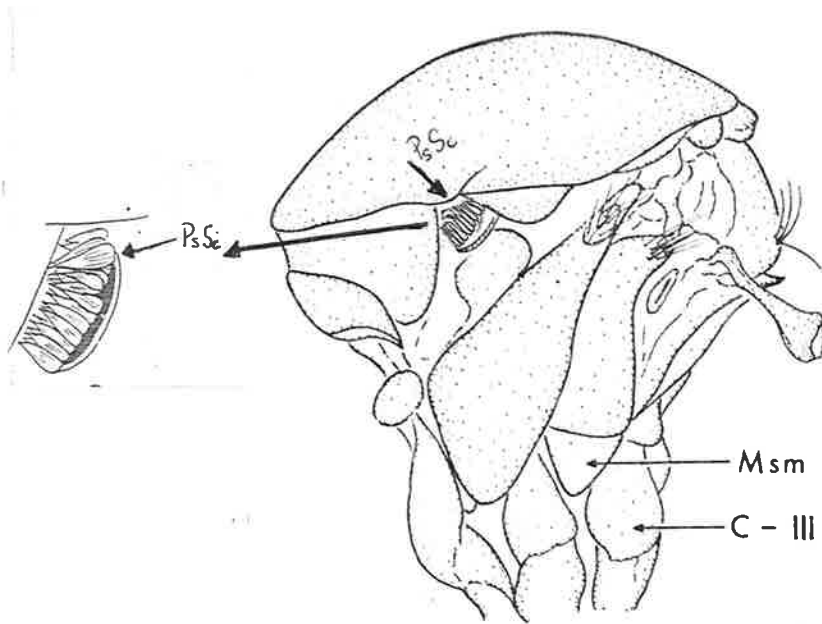
- Lateral view of thorax - *Wy. smithii*

~~B~~ Base da coxa posterior implantando-se nitidamente abaixo da margem superior do mesômero; mesômero, grande..... 14

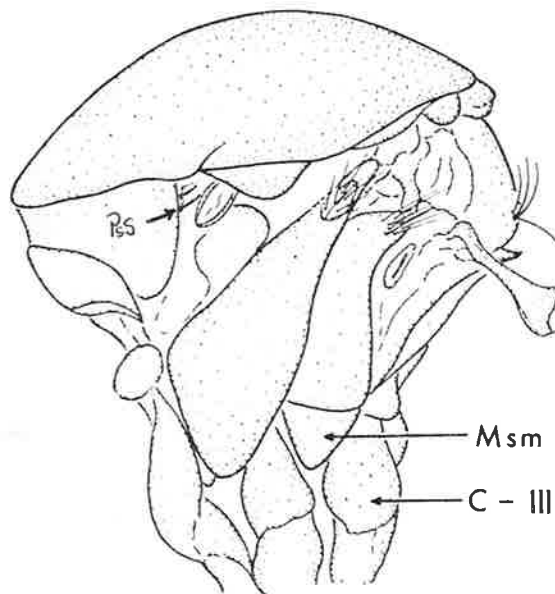


- Lateral view of thorax - *Ae. vexans*

6 (5). Área pré-espíracular com somente escamas largas, sem cerdas *Limatus*

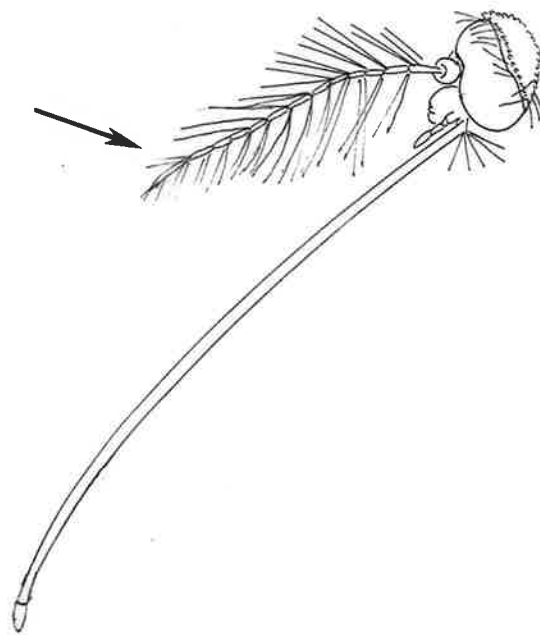


Área pré-espíracular com uma ou mais cerdas.....7

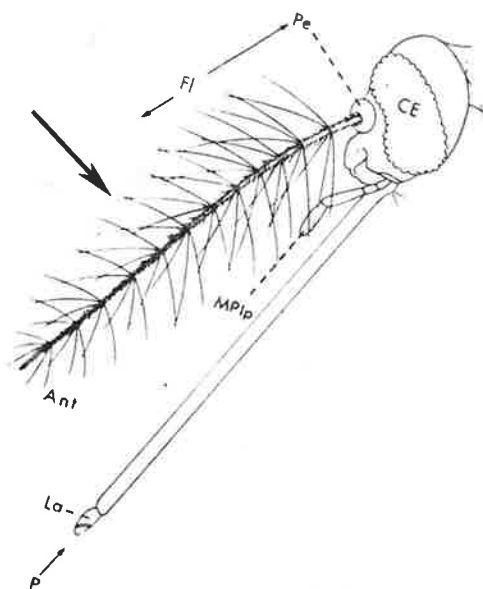


Lateral view of thorax - Wy. smithii

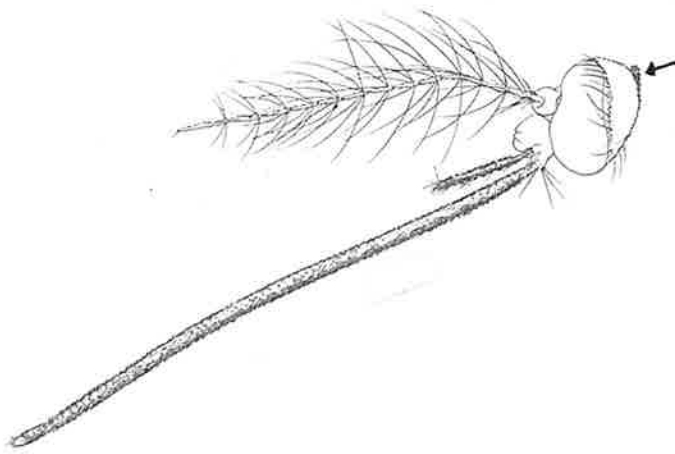
7 (6). Comprimento das antenas, igual ou menor do que a metade do comprimento da probóscida..... *Wyeomyia (Phoniomyia)*



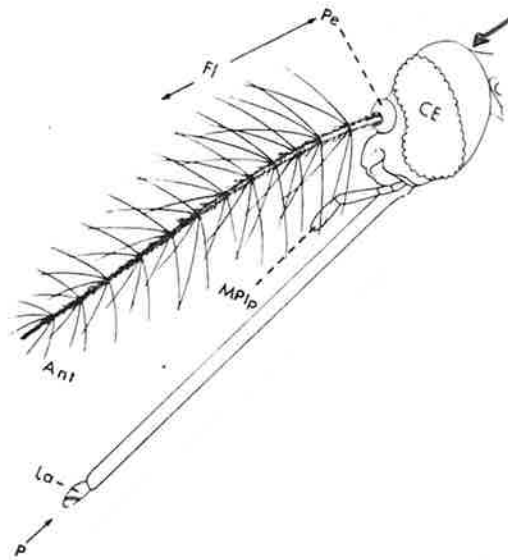
Comprimento das antenas, maior do que a metade do comprimento da probóscida, geralmente, apresentando comprimento igual ao desta..... 8



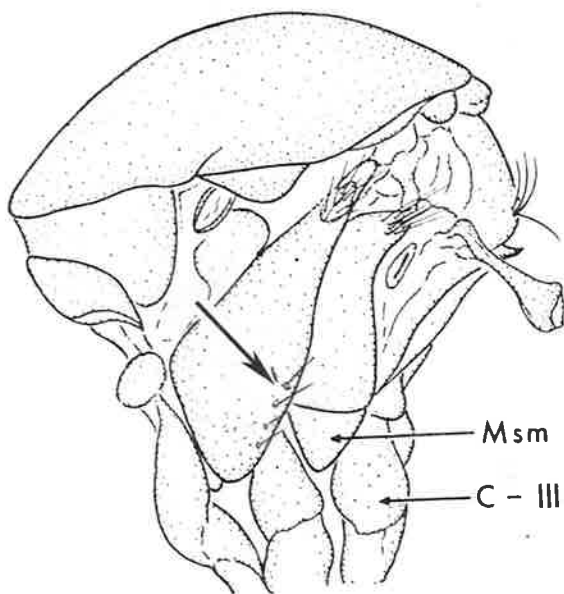
8 (7). Occipício com linha evidente de escamas eretas forquilhadas..... 9



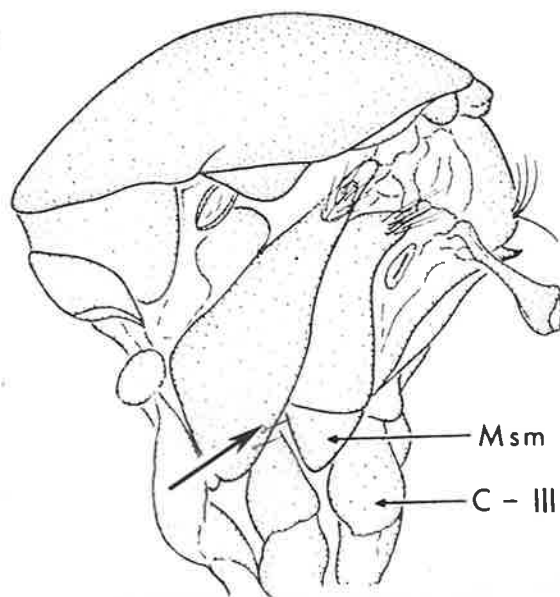
Occipício com linha inconspícua de escamas eretas forquilhadas, ou estas estão ausentes 13



9 (8). Cerdas mesocatepisternais inferiores estendendo-se dorsalmente além da
borda inferior do mesepímero..... 10

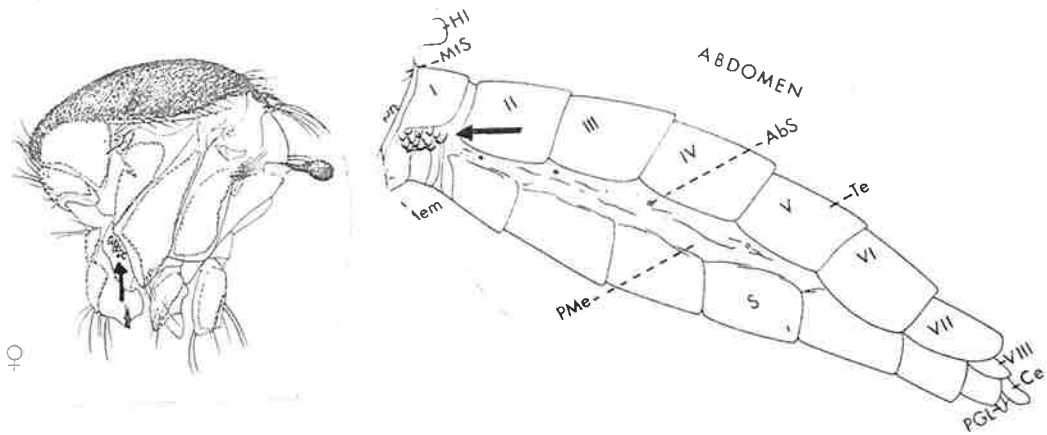


Cerdas mesocatepisternais inferiores, geralmente, não se estendendo
dorsalmente até a borda inferior do mesepímero..... 11



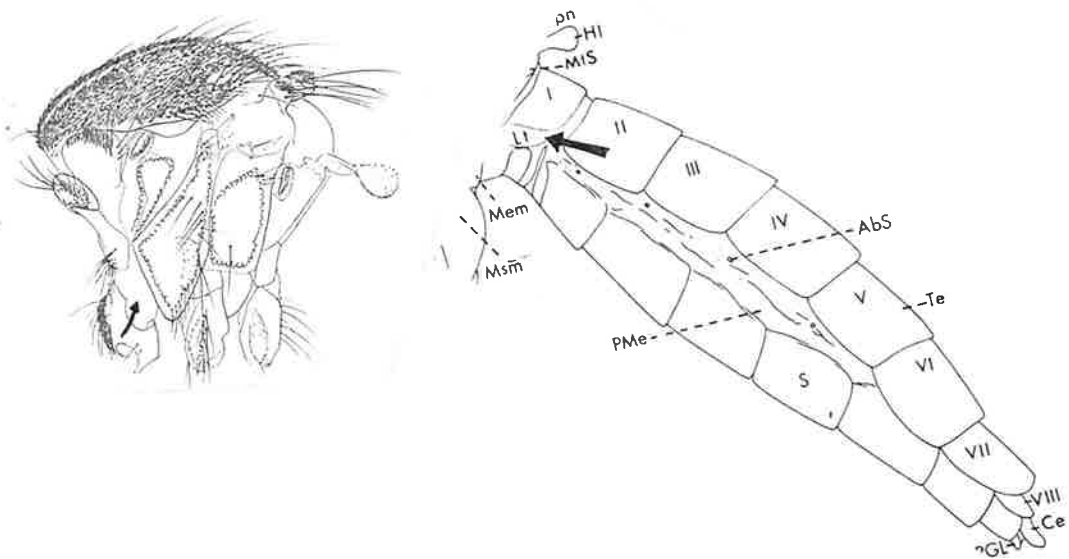
10 (9). Tíbia posterior com ampla faixa pós-mediana de escamas claras que pode ser completa ou incompleta; laterotergito do segmento abdominal I, recoberto de escamas, margem inferior não visível; membrana pós-procoxal com escamas

..... *Shannoniana*

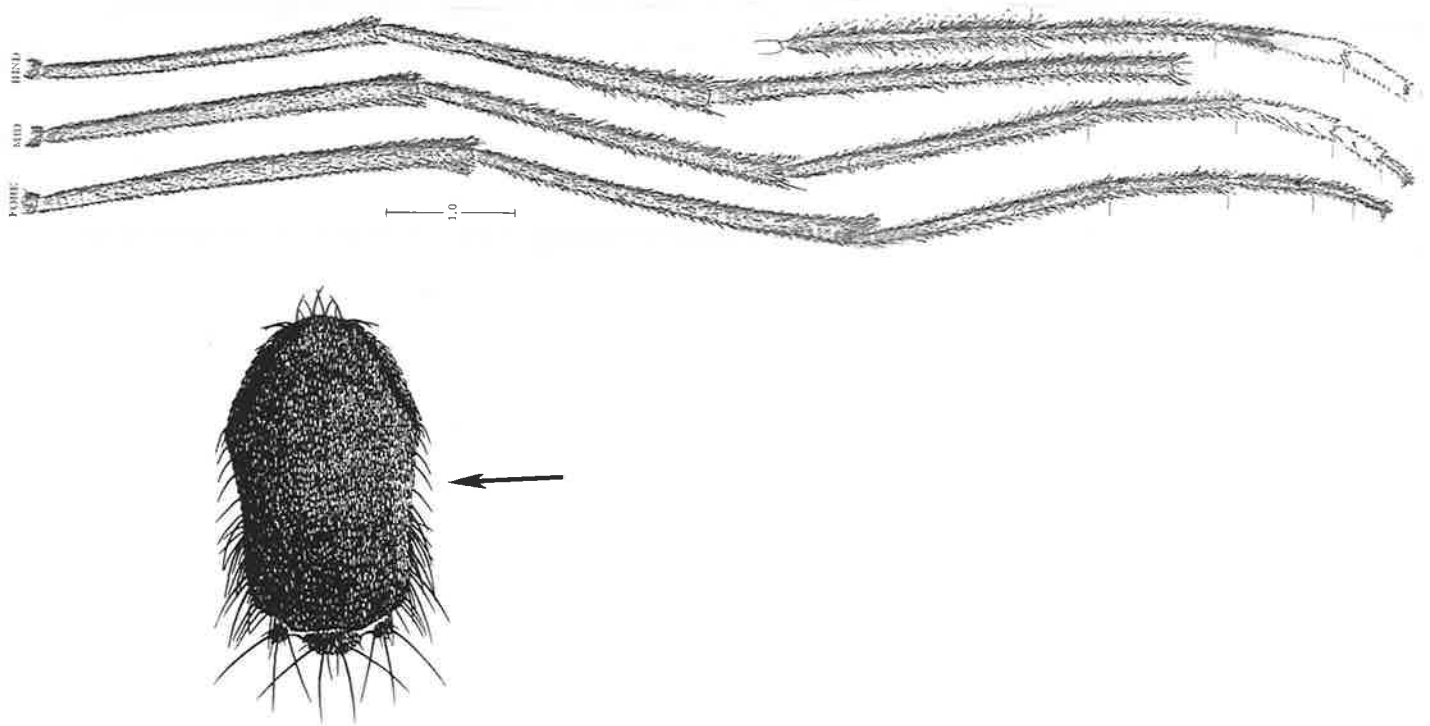


Tíbia posterior sem faixa pós-mediana de escamas claras; laterotergito do segmento abdominal I sem escamas na porção basal e com poucas escamas na distal, margem inferior visível; membrana pós-procoxal sem escamas

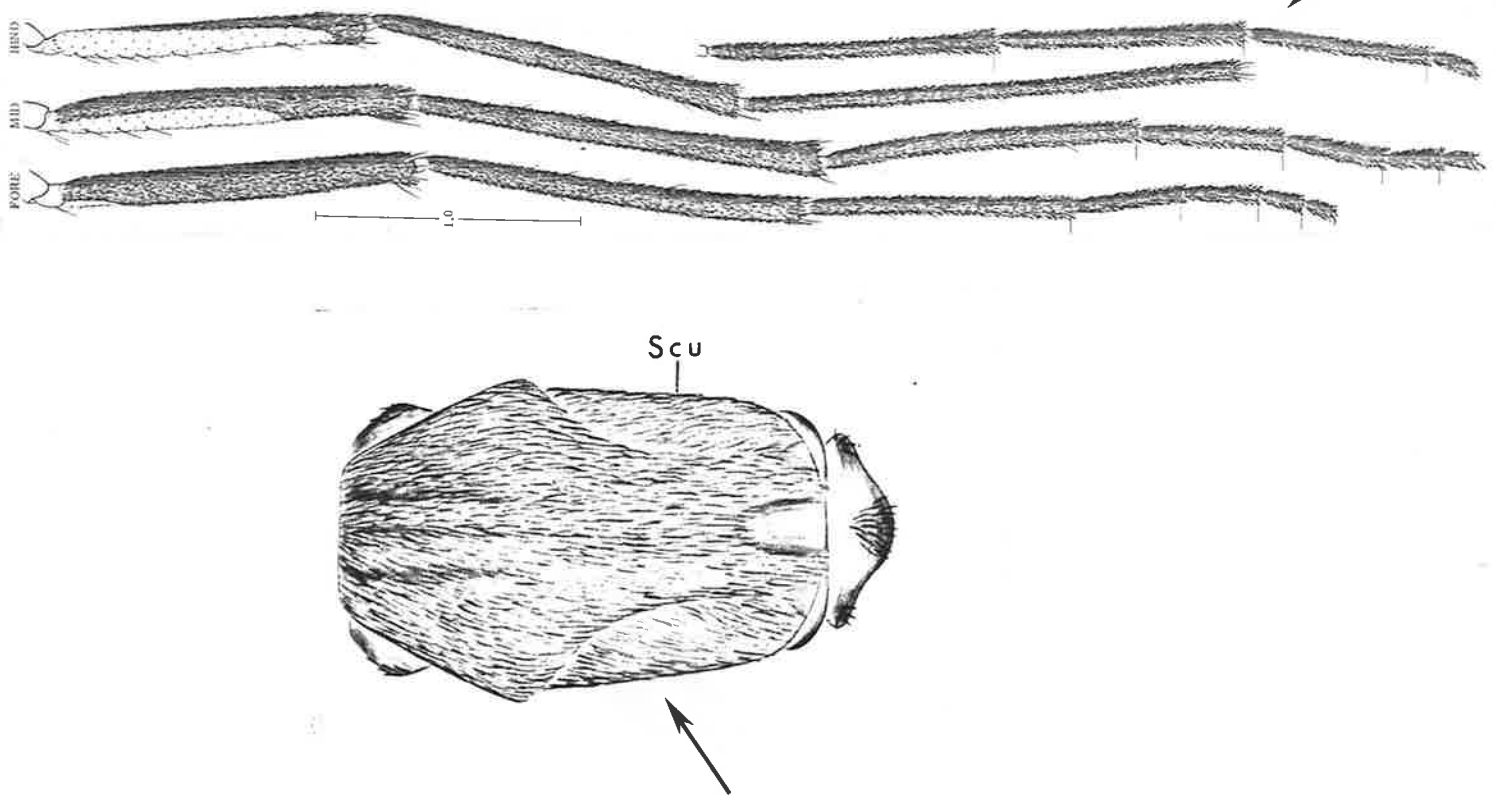
..... *Trichoprosopon*



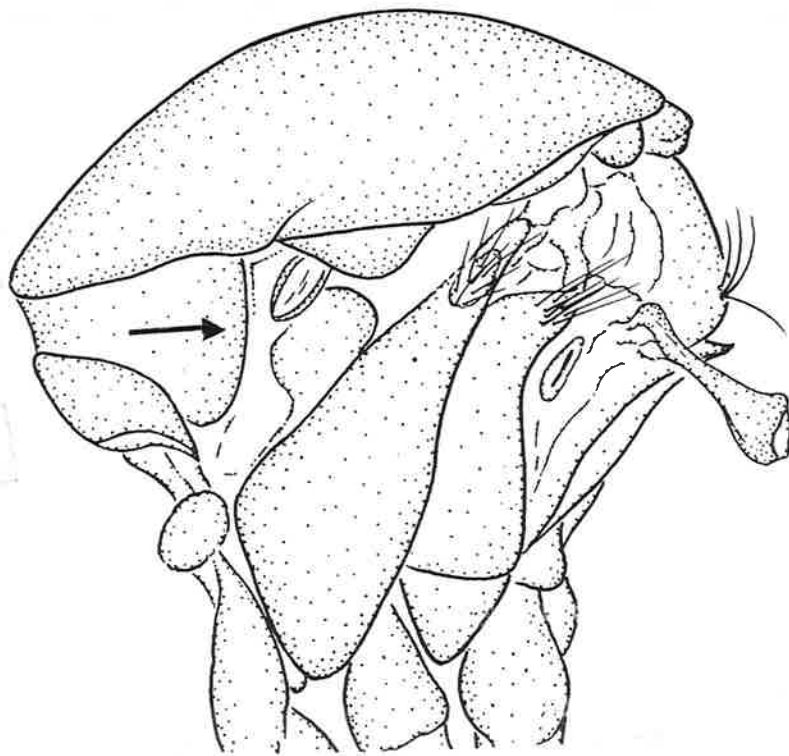
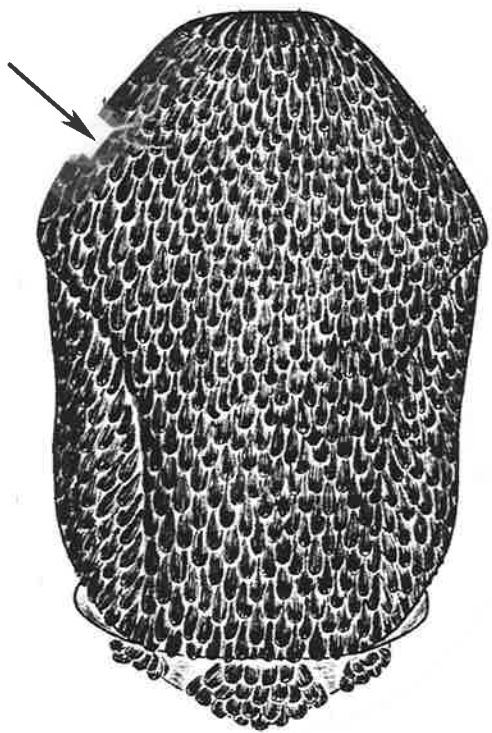
11 (9). Tarsos mediano e posterior com escamas claras e escuras; escamas do escudo, moderadamente largas e planas; escamas do vértice e occipício com reflexos prateados e azulados..... *Johnbelkinia*



Tarsos mediano e posterior inteiramente escuros; escamas do escudo, delgadas e curvas; ou escamas do vértice e occipício sem reflexos prateados e somente com reflexos esverdeados ou azulados fracos a moderados..... 12

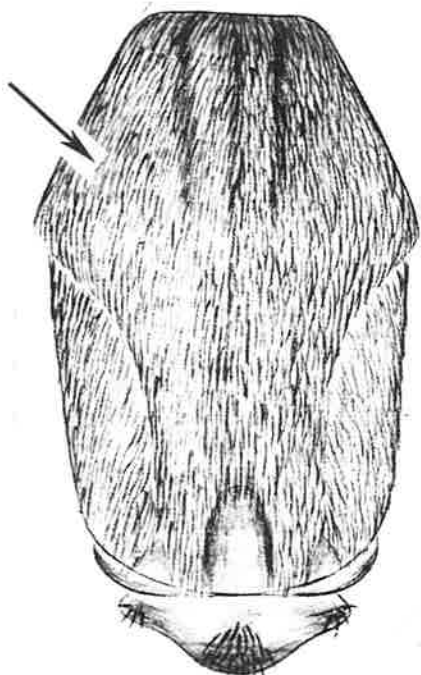


12 (11). Escamas do escudo, moderadamente largas a largas e planas; escamas do vértice sem reflexos prateados e somente reflexos azulados ou esverdeados de fracos a moderados; ~~pós~~-pronoto ^{posterior} sem cerdas posteriores *Isostomyia*

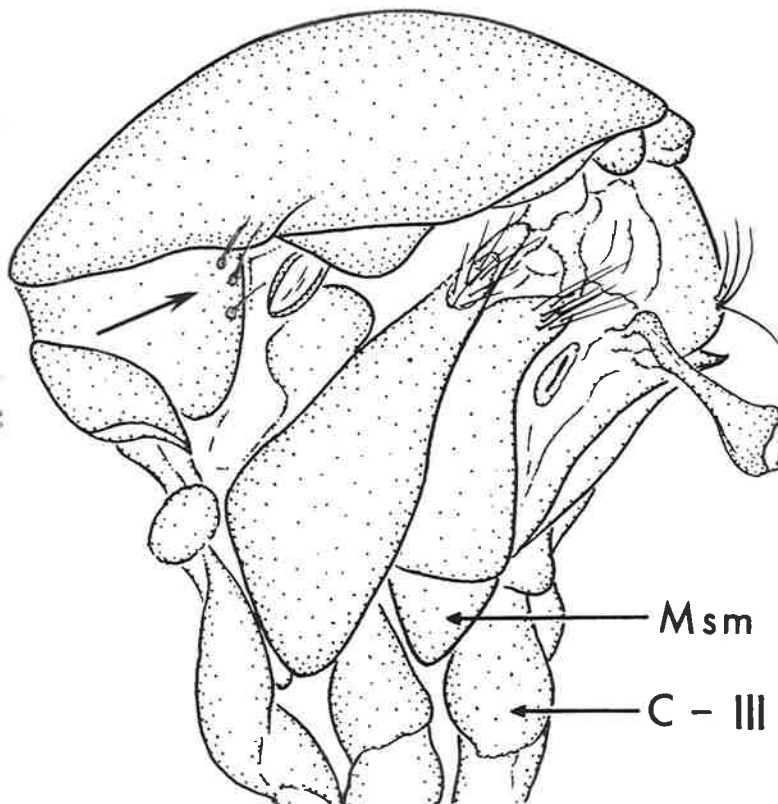


Escamas do escudo, estreitas e curvas; escamas do vértice com intensos reflexos prateados e azulados; ~~pós~~-pronoto ^{posterior} com 1 ou mais cerdas posteriores

..... *Runchomyia*



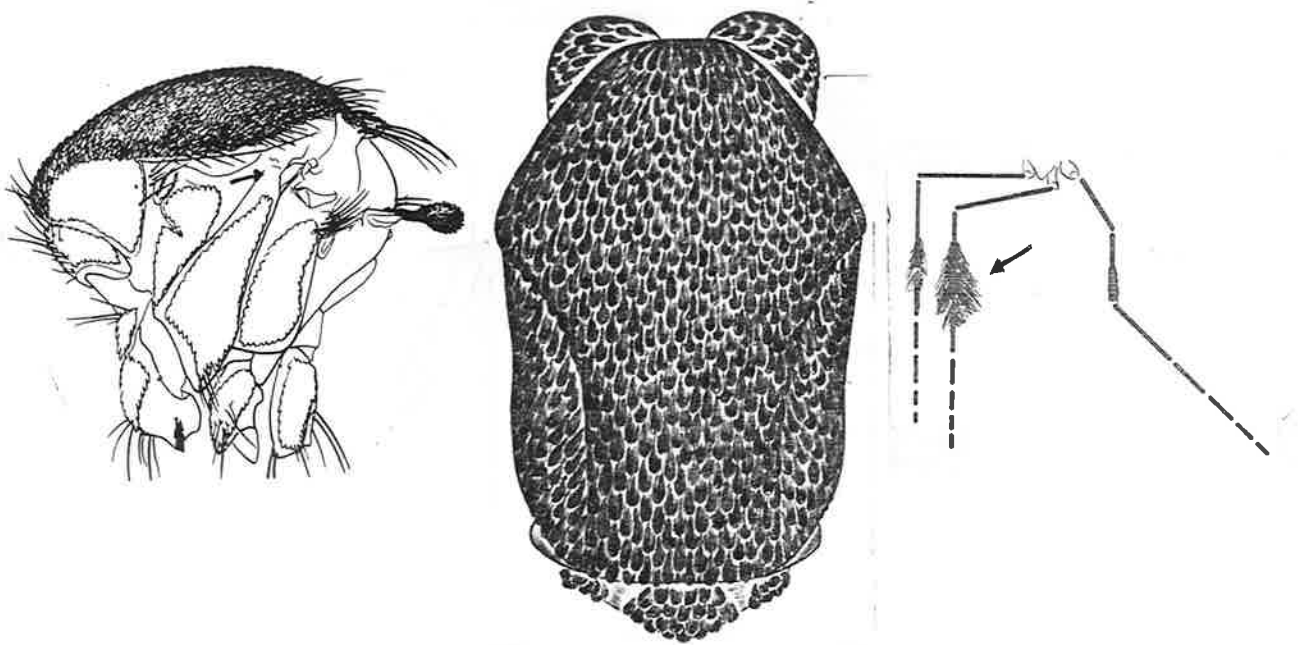
Scu



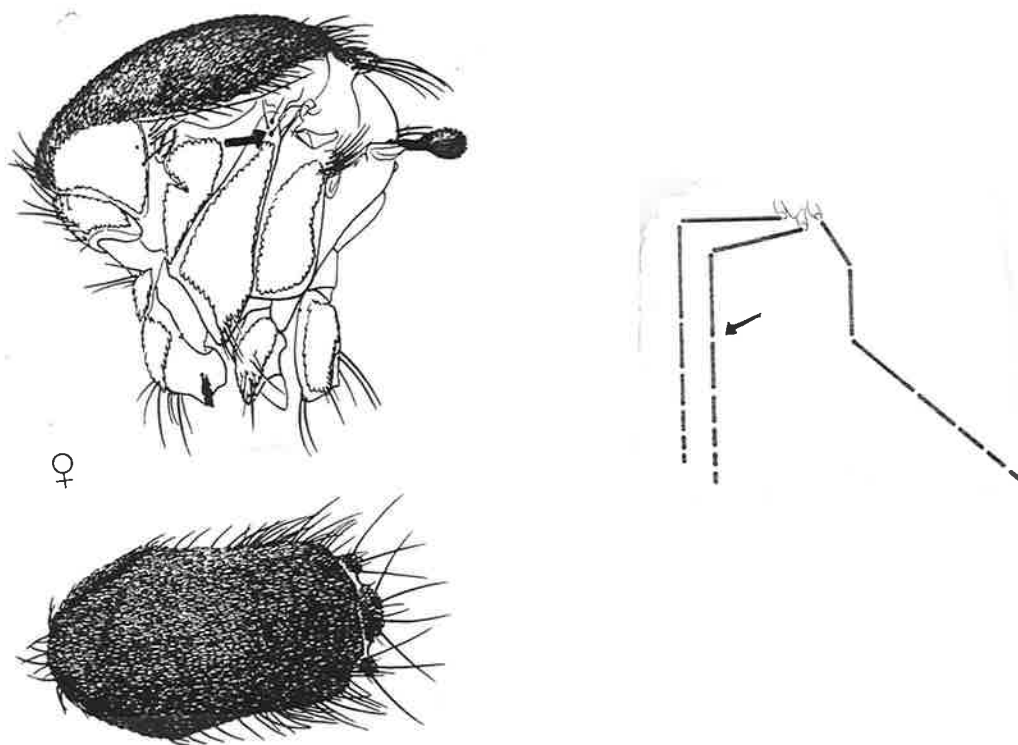
Msm

C - III

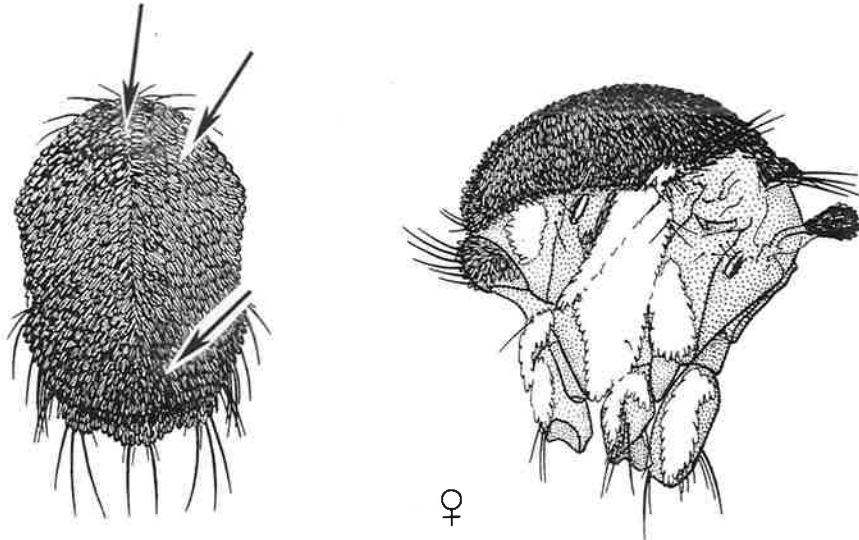
13 (8) Cerdas prelares, ausentes ou, ocasionalmente, 1, 2 presentes; escudo coberto de escamas largas e planas; mosquitos com evidente aparência metálica; patas medianas, podendo apresentar tufos de escamas longas.....*Sabethes*



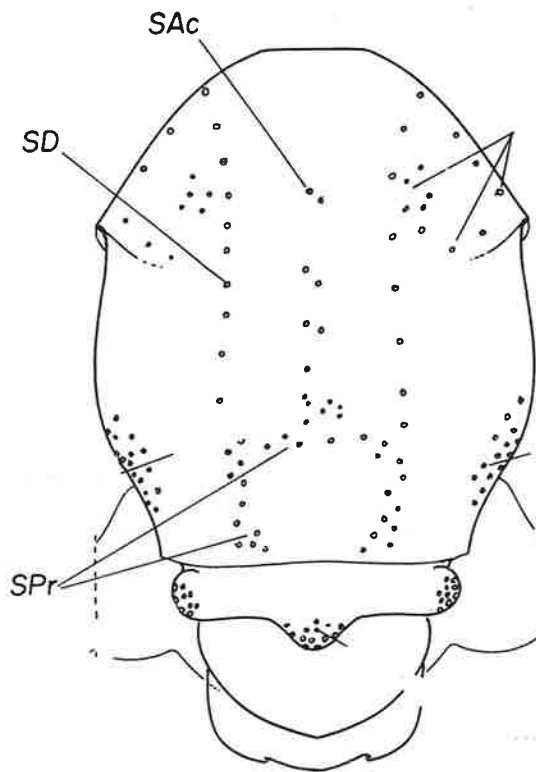
Cerdas prélares sempre presentes; escudo, geralmente, de cor escura, recoberto de escamas bronzeadas com leve brilho metálico; patas medianas sem tais tufos de escamas longas*Wyeomyia/Onirion*



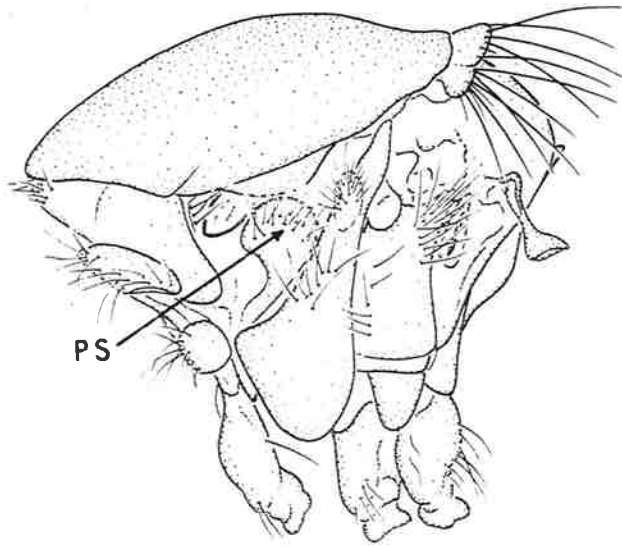
14 (5) Cerdas acrosticais, dorsocentrais e pré-escutelares, ausentes; escudo, geralmente, recoberto de escamas de tonalidade metálica brilhante, ou estas são pretas com desenho branco-prateado. Pleura com faixa vertical de escamas prateadas (subgênero *Haemagogus*) ou com três arcos verticais que se estendem do escudo até as coxas (subgênero *Conopostegus*)*Haemagogus*



Escudo com pelo menos as cerdas pré-escutelares, presentes; escamas do escudo de tonalidade variada..... 15



15 (14). Cerdas pós-espирaculares, presentes 16 ✓



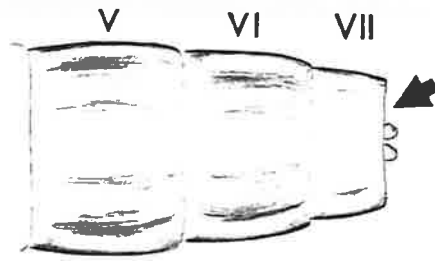
- Lateral view of thorax - *Ps. ciliata*

Cerdas pós-espирaculares, ausentes 20

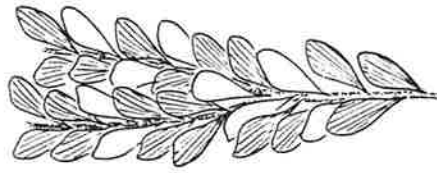


- Lateral view of thorax - *Cs. inornata*

16 (15). Escamas da superfície dorsal das veias alares R₂ e R₃, largas, ovaladas;
ápice do abdômen truncado 17



- Dorsal view of abdomen - *Ma. titillans*



- Dorsal view of some veins - *Ma. titillans*

Escamas da superfície dorsal das veias alares R₂ e R₃, estreitas; ápice do
abdômen, variavelmente, agudo 18

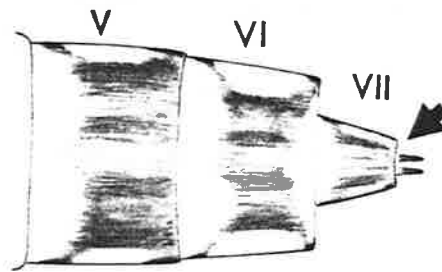
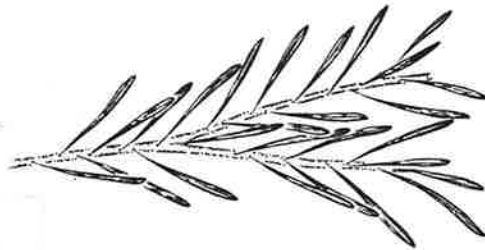


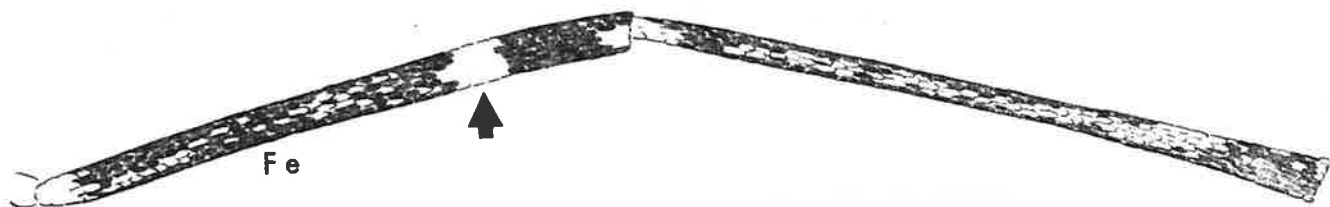
Fig. 21 — Dorsal view of abdomen - *Ae. vexans*



- Dorsal view of some veins - *Ae. vexans*

17 (16) Fêmures com escamas claras esparsas e/ou formando faixas

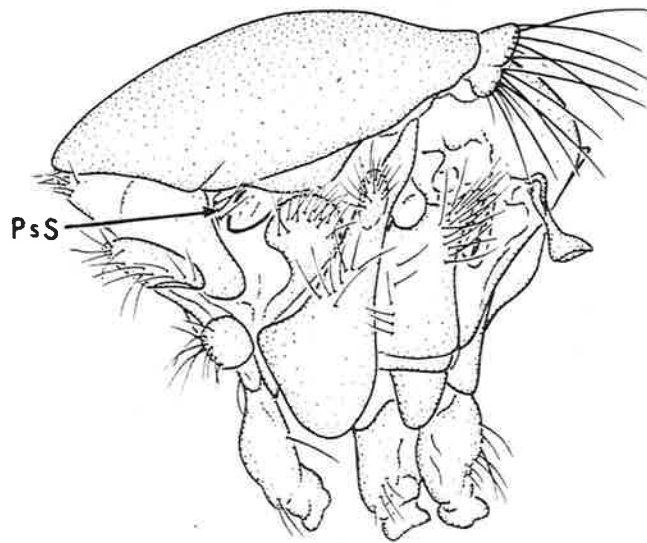
longitudinais e anel pré-apical *Coquillettidia*



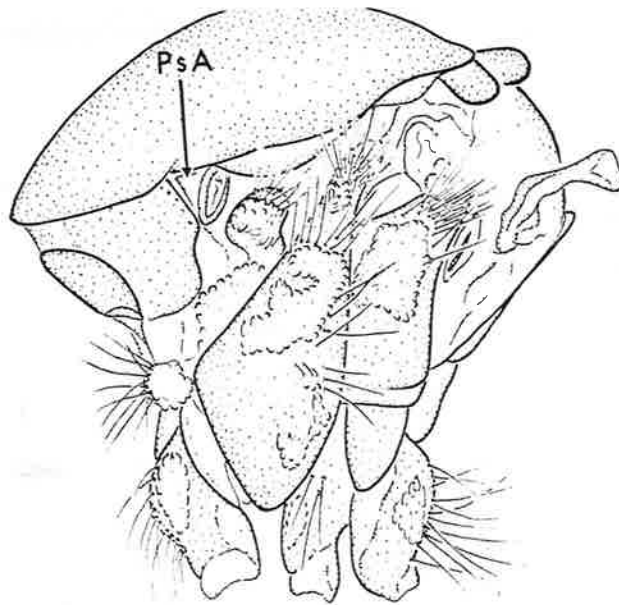
Fêmures salpicados de escamas claras e escuras, sem anel pré-apical de escamas

claras *Mansonia*





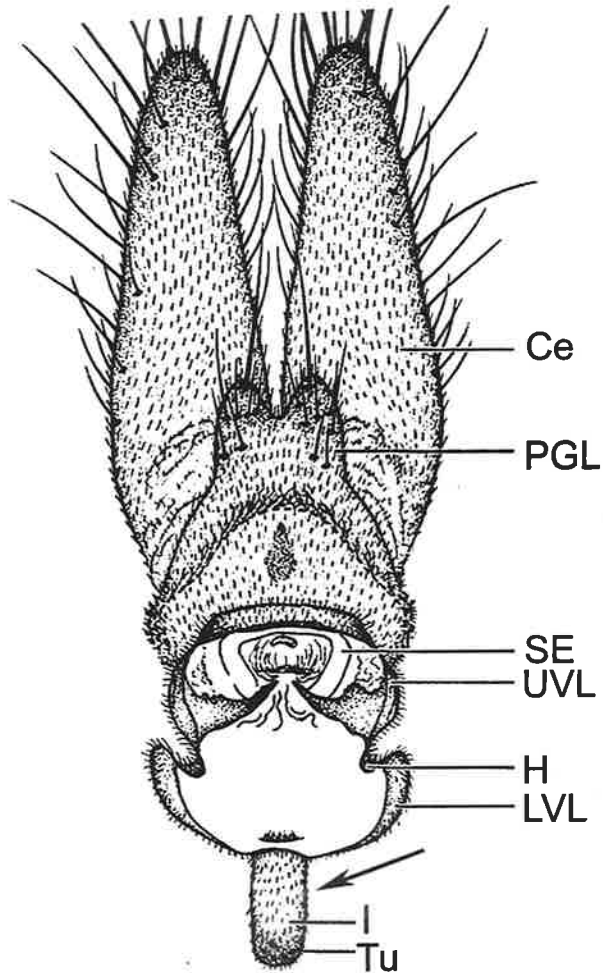
Lateral view of thorax - *Ps. ciliata*



Lateral view of thorax - *Ae. vexans*

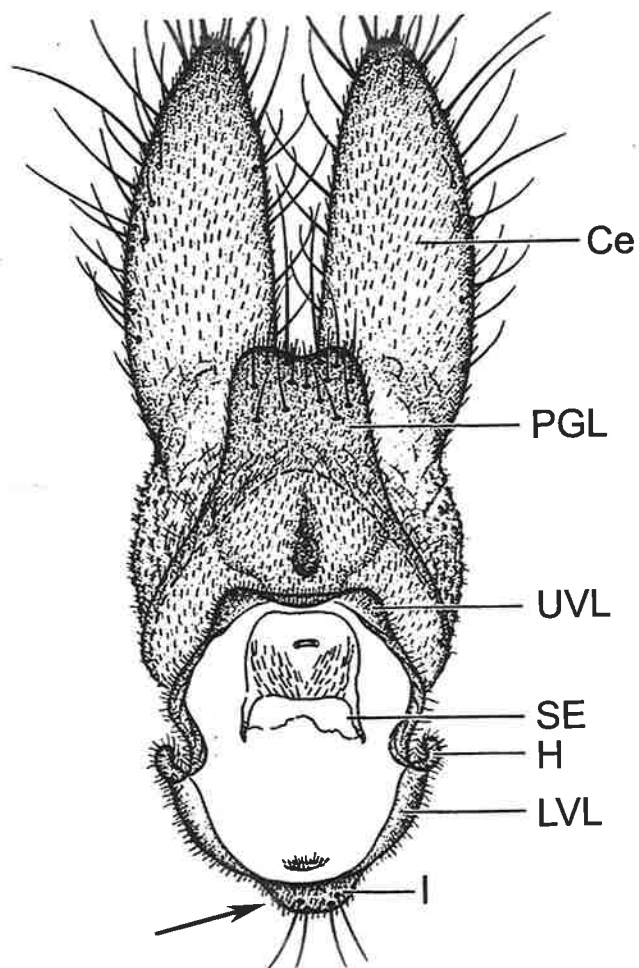
19 (18). Genitália feminina com a insula em forma de língua e sem cerdas
.....

Aedes

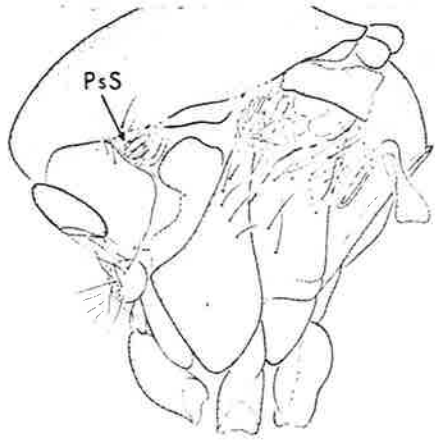


Insula, estreita; com aspecto semelhante ao de lábio, com cerdas laterais bem

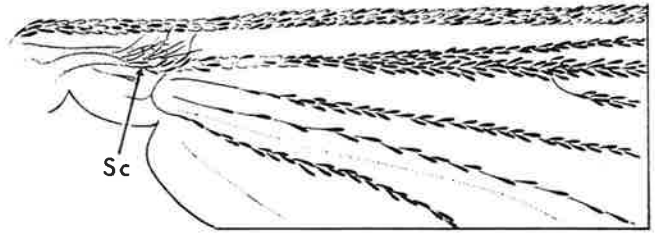
desenvolvidas.....
.....*Ochlerotatus*



20 (15) Cerdas pré-espíraculares presentes; face ventral da porção basal da veia subcosta com fileira de cerdas *Culiseta*

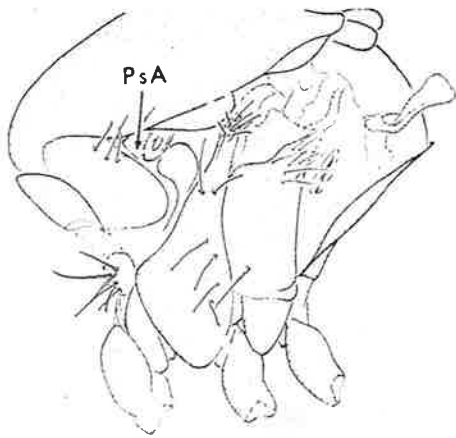


Lateral view of thorax - *Cs. inornata*

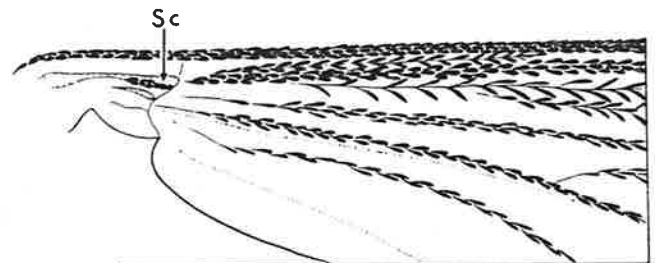


Ventral view of basal half of wing - *Cs. inornata*

Cerdas pré-espíraculares, ausentes; face ventral da porção basal da veia subcosta sem cerdas 21

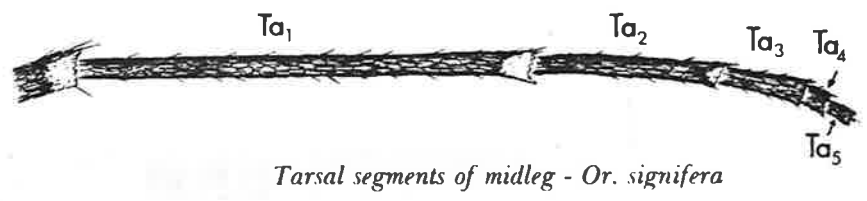


Lateral view of thorax - *Cx. pipiens*



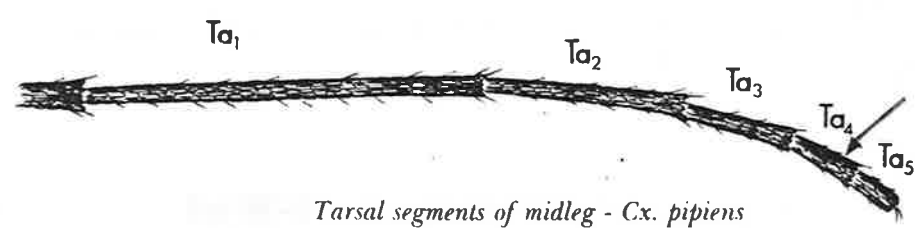
Ventral view of basal half of wing - *Cx. pipiens*

21 (20). Tarsômeros 4 das patas anterior e média, curtos, praticamente, tão largos quanto longos..... *Orthopodomysia*



Tarsal segments of midleg - *Or. signifera*

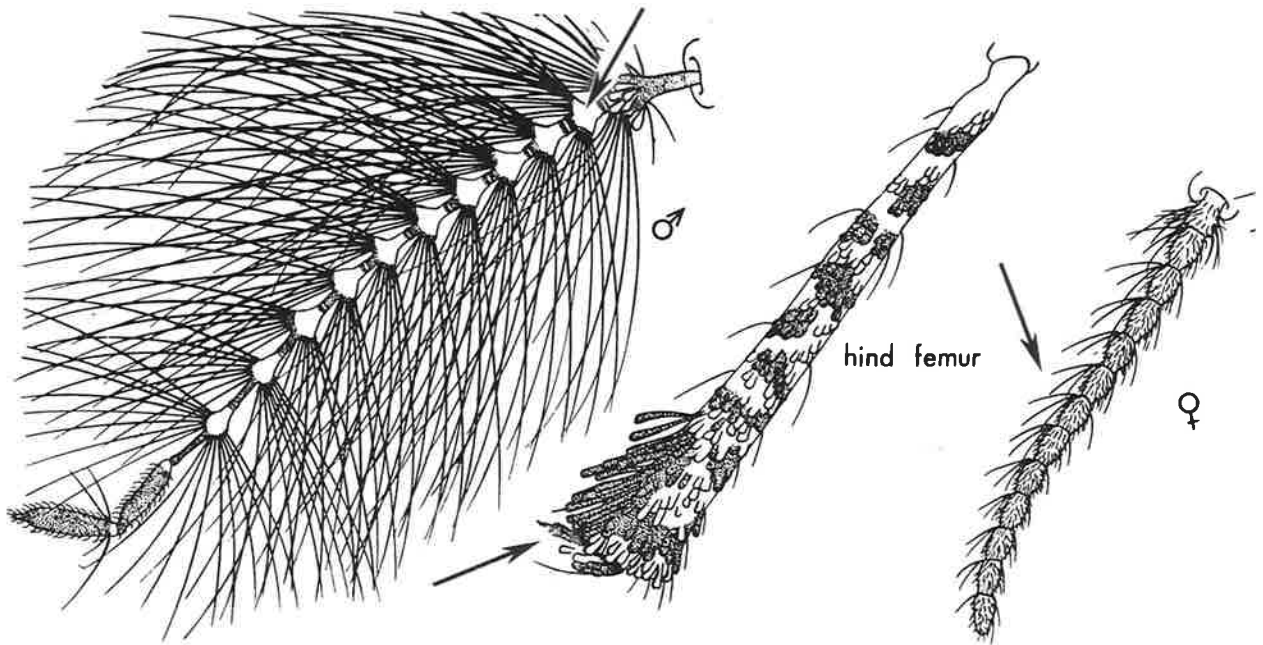
Tarsômeros 4 das patas anterior e média, mais longos do que largos..... 22



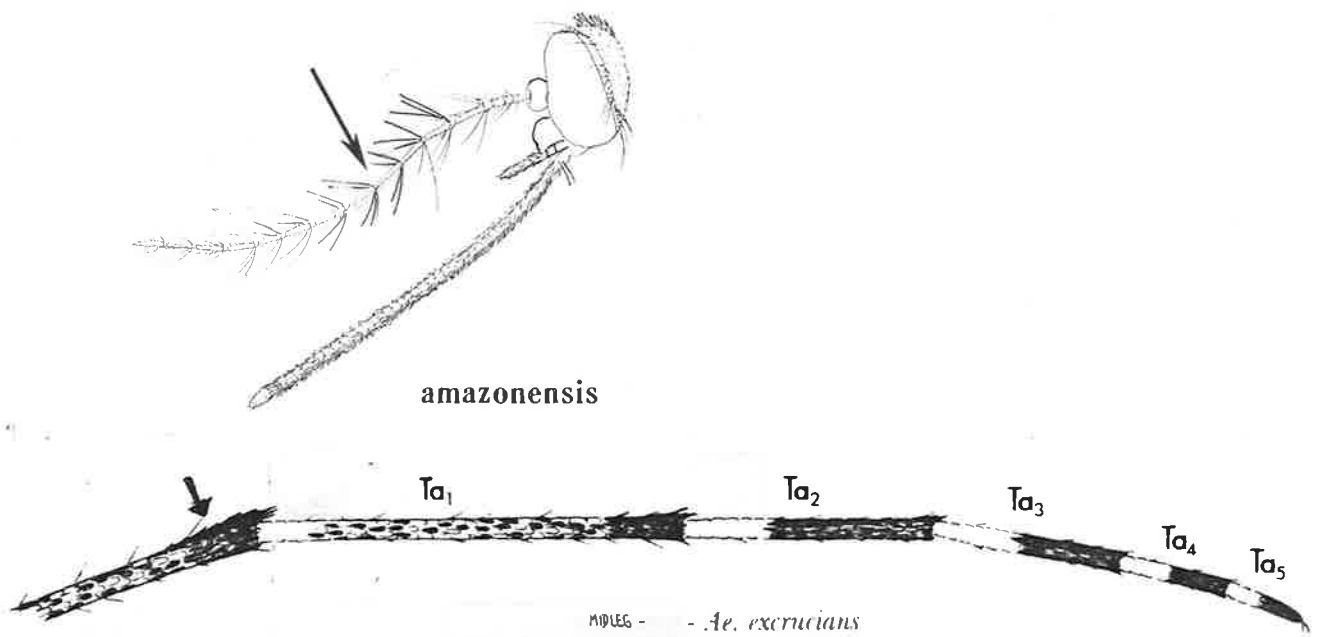
Tarsal segments of midleg - *Cx. pipiens*

22 (21). Antena com os flagelômeros curtos e grosso; fêmur mediano dotado de tufo de escamas longas, evidente na extremidade distal

.....*Aedeomyia squamipennis*



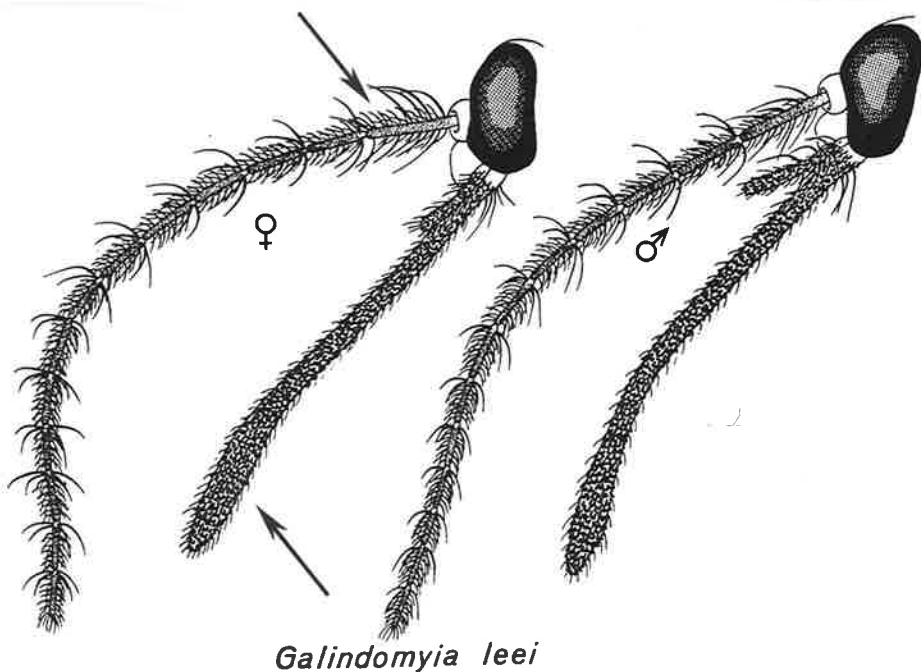
Antena com os flagelômeros normais (alongados); fêmur mediano sem tufo de escamas longas na extremidade distal..... 23



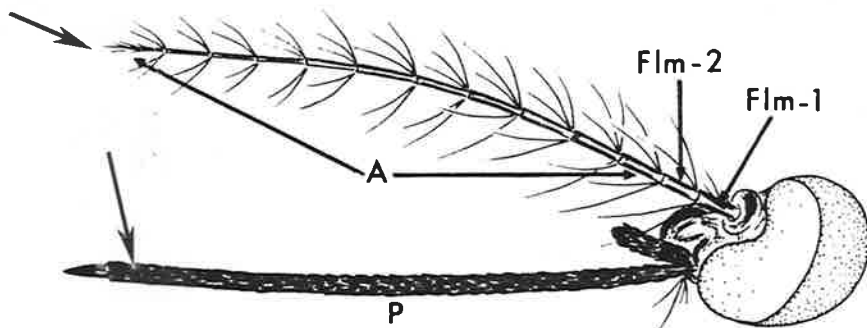
23 (22) Antena mais longa do que a probóscida,

probóscida

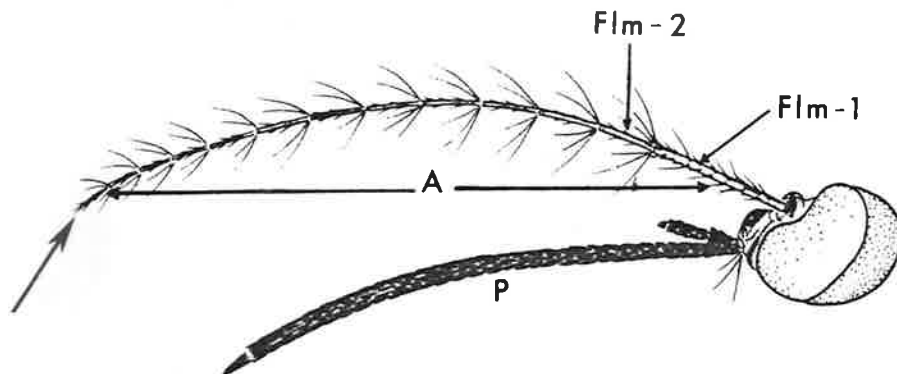
dilatada apicalmente *Galindomyia*



Antena mais curta ou tão longa quanto a probóscida, se mais longa, então seu comprimento excede o da probóscida por pelo menos o comprimento de quatro flagelômeros; probóscida não dilatada apicalmente *Culex*



Lateral view of head - *Cx. pipiens*



Lateral view of head - *De. pseudes*