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**CATALOG AND ILLUSTRATED REVIEW OF THE  
SUBGENUS MELANOCONION OF CULEX  
(DIPTERA: CULICIDAE)**

By

**James E. Pecor, Varuni L. Maliampalli, Ralph E. Harbach  
and E. L. Peyton**

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13. ABSTRACT (Maximum 200 words) This book is an up-to-date catalog and identification guide for species of the subgenus <u>Melanoconion</u> of <u>Culex</u> . It represents an extensively revised and updated amalgam of the <u>Melanoconion</u> portion of the mosquito catalog published by Knight and Stone (1977) and the illustrated review of the subgenus published by Rozeboom and Komp (1950). The cut-off date for entries in this book is December 31, 1991. This volume included 250 taxonomic names: the valid subgeneric name, 153 valid species names, 83 junior synoymy, and 13 <u>nomina dubia</u> . Six junior synonyms are recognized for the subgeneric name <u>Melanoconion</u> .				
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... and whatever the man called every  
living creature, that was its name.

*Genesis 1.19*

## PREFACE

This book might not have been prepared if we had known how much time it would eventually consume. What started out as a yearlong part-time task has lasted more than three years. In part this interval reflects the multitude of changes that have occurred in *Melanoconion* taxonomy since *A catalog of the mosquitoes of the world* was published in 1977, but the major effort involved in the preparation of this book has been directed toward expanding, updating, and improving the accuracy and coverage of information about individual species. Through all of this effort, we have hoped that this volume would be useful to students, entomologists, professional systematists, and other scientists who want a concise reference source for information on species of *Melanoconion*, many of which are vectors of arboviruses known to cause human illness. The primary objective of this book is to provide users with a clear understanding of what is known as well as what is not known about the taxonomy and biology of these species. This book is also intended to assist users in making species determinations based on features of the male genitalia, which provide the principal means of distinguishing most species.

Because this book is built upon the treatments of the subgenus *Melanoconion* in the catalog of Knight and Stone (1977) and the illustrated review of Rozeboom and Komp (1950), we deservedly recognize these authors for providing the foundation for this work. We also wish to acknowledge the many published sources from which the information for this book has been gathered. Thanks are due particularly to the many individuals and publishers who permitted us to reproduce illustrations from their publications. Taina Litwak is especially acknowledged for her special effort in making photostatic copies of published illustrations and arranging them in figures which she skillfully designed and prepared. She also prepared the two original figures which appear in this work. Finally, we wish to extend sincere thanks to Oswaldo Paulo Forattini, John F. Reinert, and Ronald A. Ward for critically reading and commenting on the manuscript, and to Bernard Geoffroy for providing information and the location of type specimens in France.

Washington, DC  
15 July 1992

JEP, VLM, REH, ELP

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CATALOG AND ILLUSTRATED REVIEW OF THE SUBGENUS  
MELANOCONION OF CULEX (DIPTERA: CULICIDAE)<sup>1</sup>

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ABSTRACT

The systematic literature covering the nominal taxa which comprise the subgenus *Melanoconion* of *Culex* is reviewed and summarized under the subgeneric and valid species names. The catalog lists 155 valid names, 83 junior synonyms, and 13 *nomina dubia*. Type data, annotated literature citations, and known distribution are provided for each valid species name and junior synonyms. The kind of type specimen and its repository, if these exist, are indicated for each nominal species. Literature citations include the authorship of synonymies, and annotations of information relevant to the concept, taxonomy, distribution, and biology of the species. The known distribution of each species is indicated by country records. The text is supplemented by virtually all previously published illustrations of male genitalia to assist users in making species determinations. Collection data for voucher specimens which document new country records and tabular listings of the various life stages and distribution of each species are presented in separate appendices.

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## INTRODUCTION

This book is an up-to-date catalog and identification guide for species of the subgenus *Melanoconion* of *Culex*. It represents an extensively revised and updated amalgam of the *Melanoconion* portion of the mosquito catalog authored by Knight and Stone (1977) and the illustrated review of the subgenus by Rozeboom and Komp (1950). The cutoff date for entries in this book was December 31, 1991.

The concept of this book came about in early 1989 when two of us (ELP and REH) received several specimens of *Melanoconion* from Werner Jakob, formerly of the Centers for Disease Control at Fort Collins, Colorado, which could not be identified using the keys and illustrations of male genitalia prepared by Rozeboom and Komp (1950). This revealed the need for an up-to-date identification guide which would include illustrations of male genitalia for those species described and named since 1950. Such an updated guide would have made it much easier to determine the identity of the specimens received from Mr. Jakob, and from other sources. Such a guide would also assist in determining whether such specimens represented a species new to science by eliminating the need to search through volumes of literature for numerous, more recent species treatments. The idea to develop a combined catalog and illustrated review evolved as a result of this situation, and concomitant discussions with the senior author about the need to correct numerous errors in the *Melanoconion* portion of Knight and Stone's (1977) catalog which were discovered while performing extensive curatorial work on type specimens and related material deposited in the National Museum of Natural History, Smithsonian Institution.

Rozeboom and Komp (1950) and Sirivanakarn (1983) reviewed the taxonomic history of the subgenus. Rozeboom and Komp (1950) treated 91 species, which included the original citation, date, synonyms, taxonomic notes, and illustrations of structures of the male genitalia for each species, and a key for their identification based on features of the male genitalia. Sirivanakarn (1983) recognized 150 species, but only provided illustrations for males of 46 species and females of 13 species. He provided keys for recognizing infrasubgeneric groups of species based on morphological characters observed in adults, male genitalia, larvae, and pupae. This book treats 154 species, excluding *Culex diamphidius* Peyton and Harbach, 1992, which was described and named after December 31, 1991.

This volume includes 251 taxonomic names: the valid subgeneric name, 154 valid species names, 83 junior synonyms, and 13 *nomina dubia*. Six junior synonyms are recognized for the subgeneric name *Melanoconion*. *Gnophodeomyia* Theobald is removed from synonymy with *Melanoconion* because the identity of the type species *inornata* Theobald, 1905 has been regarded as uncertain since Belkin (1970) (see Note 1, p. 59). The sectional names *Dinoporpa* and *Upsiloporpa*



proposed by Dyar (1928) and Komp and Curry (1932), respectively, are retained as synonyms of *Melanoconion* because they are deemed to be subgeneric names in accordance with Article 10e of the *International Code of Zoological Nomenclature* (1985). The names of five nominal species which comprise the *Ocellatus* Group of Sirivanakarn (1983), i.e., *Culex ocellatus* Theobald, 1903, along with its junior synonym of *automartus* Root, 1927b; *Culex nigrimacula* Lane and Whitman, 1943; *Culex punctiscapularis* Floch and Abonnenc, 1946b; and *Culex flochi* Duret, 1969c are not included. We have determined that this group of species does not belong in the subgenus *Melanoconion*, and one of us (VLM) will treat it in a phylogenetic study to be published at a later date. For the time being, these species are regarded as members of the genus *Culex* without subgeneric assignment.

This work is the first mosquito catalog of its kind. It includes reproductions of virtually all the original line drawings of male genitalic structures published for currently recognized species of *Melanoconion* and their synonyms. The drawings are included as identification aids because the concepts and recognition of most species are based primarily on the male genitalia. Since the original plates of these drawings are mostly unavailable, the figures included here have been produced from photostatic copies of published works. The inclusion of varied drawings for each species, however, does not purport to imply that different authors have always accurately and correctly illustrated the genitalia of the species intended. In a few cases it is clear that more than one species is shown and in a few others it appears that some may be synonymous. We have not addressed these in this book, preferring instead to wait for a more careful study of each. In most cases, users will have little difficulty deciding which drawings unequivocally represent a particular species (particularly if based on type specimens), and which are most useful in making species determinations. Users, however, should not rely entirely on the drawings for making critical species determinations, especially when dealing with possible new species or new country records. In special cases, original species descriptions, type specimens, confirmed voucher specimens, a professional systematist, or a combination of these should be consulted. The genitalia of *Culex adamesi* Sirivanakarn and Galindo, 1980 and *Culex crybda* Dyar, 1924b are illustrated for the first time, based on type specimens or material compared with type specimens.

Corrections and additions made to information contained in Knight and Stone (1977), as well as that contained in the supplements prepared by Knight (1978) and Ward (1984), are too numerous to list individually. In general, the following items of information have been corrected for numerous entries: year of

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\*In some cases authors have reproduced previously published illustrations. These are included here except for those found in Matheson (1929, 1944), Yamaguti (1952), Yamaguti and LaCasse (1951), and Ross and Horsfall (1965).

The description of *Culex guedesi* da Silva Mattos and Xavier, 1991 was brought to our attention by Dr. Oswaldo P. Forattini as a result of his review of the manuscript. Hence, the original line drawings for this species could not be placed in alphabetical sequence and appear on the last page of figures.

publication, page of citation, spelling of author, species and type locality names, distribution, and life stages indicated for type specimens and illustrations. Likewise, the following types of information have been added where appropriate: country records, citations for lectotype designations, and indications of life stages described and illustrated. In addition, this work includes literature citations for the authorship of synonyms, and related situations established prior to Edwards (1932). Changes of a more complex nature or requiring additional comment are explained in a taxonomic notes section (p. 59).

#### EXPLANATORY NOTES

For ease of use and clarity, this catalog is organized in an innovative format. All valid names appear in **boldface type**, valid species names (senior synonyms) are arranged in alphabetical order, and all synonymous names (junior synonyms) are *italicized* and arranged chronologically under the appropriate valid name.

#### Components of Main Entries

These are the components of a typical valid species entry:

***epanastasis*** Dyar, 1922: 191 ( $\delta^*$ ). Fig. 41; Notes 2,10.

Holotype  $\delta$ : Arenal River, Toro Point, Canal Zone, Panama (NMNH).

Dyar 1928: 296 ( $\delta^*$ ); Komp 1935: 4 (syn. with *taeniopus*); Galindo 1969: 86 (resurrected from syn.); Heinemann and Belkin 1977b: 453 (Nicaragua); Heinemann and Belkin 1978a: 408 (French Guiana); Sirivanakarn and Belkin 1980:10 (tax.).

DISTRIBUTION: French Guiana, Nicaragua, Panama.

*pseudotaeniopus* Galindo and Blanton, 1954: 240 ( $\delta^*$  P\* L\*). Holotype  $\delta$ : Mojinga Swamp, Canal Zone, Panama (NMNH). Galindo 1969: 88 (tax.); Sirivanakarn and Belkin 1980: 11 (syn.).

The valid species name (***epanastasis***) is followed on the same line by the name(s) of the author(s), year of publication, page of citation, abbreviation(s) for the life stage(s) originally described (those illustrated at least in part are marked with an asterisk), original generic placement if other than *Culex* (not applicable to this entry), reference to one or more figures of the male genitalia, and, in some cases, reference to a special note or notes about the taxonomy or distribution of the

species. Type data, annotated literature citations, known distribution, and junior synonyms with associated type data and annotated literature citations appear as separate, indented subentries beneath the valid species name.

#### Subentries

**Type data.** This entry includes the kind of name-bearing type for the valid species name, i.e., holotype, lectotype, or syntypes, the adult sex or other life stages of the type specimen(s), the type locality, and a capitalized abbreviation within parenthesis for the type depository. Type localities are given exactly as they appear in the original description, with subsequent modifications, e.g., change of country name, indicated in brackets. Abbreviations and the associated names of type depositories are listed at the end of the explanatory notes section (p. 7).

**Annotated literature citations.** Only the most important literature relative to the valid species name is listed. Citations are listed in chronological order. They include author(s) name(s), date of publication, page number on which the species treatment is found or begins, and annotations of information relevant to the concept, taxonomy, distribution, and biology of the species. Abbreviations used in the annotations are listed with their meanings at the end of the explanatory notes section (p. 6). An asterisk (\*) following an abbreviation for any life stage indicates that at least part of the life stage was illustrated in the publication cited. Citations are included for all lectotype designations, as well as country records first established after the original species description.

**Distribution.** The known distribution of the species is indicated by country records, including those established by junior synonyms. Countries are listed alphabetically, and those included in the original description are underlined. For some species, certain country records were first recorded in *A synoptic catalog of the mosquitoes of the world* by Stone, Knight and Starcke (1959). Although a catalog seems to be an unlikely place to find new distribution records, these are valid records based on specimens which Alan Stone personally examined and identified while serving as curator of the U.S. National Mosquito Collection (Stone et al. 1959: 4). All but a few of these records (those indicated by question marks) are recognized herein and attributed *de jure* to Stone, Knight and Starcke. In keeping with these authors, new country records are also included in the present work. These countries appear in the distribution list with "Appendix I" following immediately in parentheses (not applicable to this entry). Appendix I provides collection data for voucher specimens contained in the U.S. National Collection.

**Junior synonyms.** Junior synonyms, when these exist for a particular species name, are listed as separate subentries in chronological order beneath the distribution. The same items of information provided for the valid species name are listed in continuous sequence after the italicized synonymous name. Literature citations are limited to those that contain information of taxonomic significance.

### Additional Information

This work includes three appendices. Appendix I, mentioned above, contains information about specimens deposited in the U.S. National Museum of Natural History which documents the new country records introduced in this book. Appendix II provides a listing of the various life stages known and described for each species, and Appendix III provides a succinct distribution of each species in table format. Appendices II and III provide a bird's-eye-view of gaps in our knowledge of species of *Melanoconion*.

Diacritical marks are not included in this work following the precedent established by Knight and Stone (1977). The practice was also followed in publications resulting from the Mosquitoes of Middle America project (Belkin and Heinemann 1973).

### Definition of Types Mentioned

**Haplotype** – the only species originally included in a genus.

**Holotype** – a single specimen designated as the name-bearing type of a species when it was established, or a single specimen on which a species was based when no type was specified.

**Lectotype** – a syntype designated as the single name-bearing type specimen subsequent to the establishment of a nominal species.

**Logotype** – the type species of a genus by subsequent designation.

**Orthotype** – the originally designated type species of a genus.

**Syntype** – each specimen of a type series from which neither a holotype nor a lectotype has been designated.

### Abbreviations Used\*

#### General

♂	Male	Pe	Pupal exuviae
♀	Female	desig.	Designation
A	Adult	emend.	Emendation
E	Egg	info.	Information
L	Larva	loc.	Locality
Le	Larval exuviae	syn.	Synonymy
P	Pupa	tax.	Taxonomy

\*Although not used in this book, the three-letter abbreviation *Mel* is recommended for the subgenus name *Melanoconion* in keeping with the practice initiated by Reinert (1975).

Type depositories

A	Collection of author of species
BA	Museo Argentino de Ciencias Naturales "Bernadino Rivadavia", Buenos Aires, Argentina (Formerly Museo Nacional de Ciencias Naturales "Bernardino Rivadavia")
CPRR	Centro de Pesquisas Rene Rachou, Brazil
DERM	Servicio de Entomologia Taxonomica, Division de Endemias Rurales, Maracay, Venezuela
EUO	Seccion de Entomologia, Departamento de Parasitologia y Microbiologia, Escuela de Medicina, Universidad de Oriente, Ciudad Bolivar, Venezuela
FMRP	Departamento de Parasitologia da Faculdade de Medicina, Ribeirao Preto, Sao Paulo, Brazil
FSP	Faculdade de Saude Publica, Universidade de Sao Paulo, Brazil
INM	Instituto Nacional de Microbiologia, Carlos G. Malbran, Buenos Aires, Argentina
IOC	Instituto Oswaldo Cruz, Rio de Janeiro, Brazil
ITH	Instituut voor Tropische Hygiene en Geographische Pathologie, Amsterdam, Netherlands
NHM	The Natural History Museum, London, England (Formerly British Museum (Natural History))
LU	Location unknown
MNHP	Museum National d'Histoire Naturelle, Paris, France
NE	Type non-existent
NMNH	National Museum of Natural History, Smithsonian Institution, Washington, DC, USA
PIG	Institut Pasteur, French Guiana
PIP	Institut Pasteur, Paris, France
STMPR	School of Tropical Medicine, San Juan, Puerto Rico

## CATALOG OF THE SUBGENUS MELANOCONION

Subgenus *Melanoconion* Theobald

*Melanoconion* Theobald, 1903: 238 (new genus). Logotype: *atratus* Theobald (Dyar 1905b: 49). Dyar and Knab 1906a: 205 (syn. with *Culex*); Dyar 1918a: 103 (to subgeneric status).

*Melanoconium* Blanchard, 1905: 395 (unjustified emend.). Dyar and Knab 1906a: 205 (syn.).

*Mochlostyrax* Dyar and Knab, 1906a: 223 (new genus). Orthotype: *caudelli* (Dyar and Knab). Howard, Dyar and Knab 1915: 216 (syn. with *Culex*); Dyar 1918a: 107 (to subgeneric status); Rozeboom and Komp 1950: 77 (syn. with *Melanoconion*); Foote 1954: 1 (to subgeneric status); Belkin, Heinemann and Page 1970: 92 (syn.); Stone and Haeger 1970: 37 (L E; tax.).

*Choeroporpa* Dyar, 1918a: 103 (new subgenus). Orthotype: *anips* Dyar. Dyar 1928: 269 (syn. with *Mochlostyrax*); Edwards 1932: 212 (syn. with *Melanoconion*).

*Helcoporpa* Dyar, 1918b: 125 (new subgenus). Haplotype: *menytes* Dyar. Dyar 1928: 269 (syn. with *Mochlostyrax*); Edwards 1932: 212 (syn. with *Melanoconion*).

*Dinoporpa* Dyar, 1928: 286 (section of *Melanoconion*). Haplotype: *trifidus* Dyar. Edwards 1932: 213 (syn.).

*Upsiloporpa* Komp and Curry, 1932: 82 (section of *Melanoconion*) Haplotype: *haynei* Komp and Curry. Komp 1935: 3 (syn. of *haynei* with *menytes* Dyar).

See Note 1.

Important references: Dyar 1928 ( $\delta^*$  ♀ P L\*); Rozeboom and Komp 1950 ( $\delta^*$ ); Foote 1954 (P\* L\*); Stone and Knight 1957 (type info.); Belkin 1968 (type info., bionomics); Belkin, Schick and Heinemann 1965, 1966, 1968, 1971 (type info., bionomics); Mattingly 1970, 1976 (E\*); Sirivanakarn 1983 ( $\delta^*$  ♀\* P\* L\*).

Species of *Melanoconion*

**abominator** Dyar and Knab, 1909c: 257 (A). Fig. 1.

Lectotype ♂: Plano, Texas, United States (NMNH).

Howard, Dyar and Knab 1913: Fig. 69 (♂\*); Howard, Dyar and Knab 1915: 378 (in part, ♂; misidentification of ♀ L, see *erraticus*); Dyar and Knab 1918: 170 (syn. with *erraticus*); Dyar 1928: 299 (♂\*; as *erraticus*); King and Bradley 1937: 352 (tax., resurrected from syn., lectotype desig.); Matheson 1944: 220 (♂ L); Wirth 1945: 199 (♂\* L\*); Rozeboom and Komp 1950: 86 (♂\*); Yamaguti and LaCasse 1951: 75 (♂\* ♀\* P\* L\*); Yamaguti 1952: 29 (♂\*); Foote 1954: 12 (L\*); Carpenter and LaCasse 1955: 300 (♂\* ♀\* L\*); Mattingly 1970: 18 (E\*); Sirivanakarn 1983: 280 (♀\*).

DISTRIBUTION: United States.

**abonnenci** Clastrier, 1970a: 468 (♂\*). Fig. 2.

Holotype ♂: Foret du Gallion, French Guiana (MNHP).

DISTRIBUTION: French Guiana.

**adamesi** Sirivanakarn and Galindo, 1980: 26 (♂\*[habitus], ♀\* P\* L\*). Fig. 2; Note 2.

Holotype ♂: across canal from Summit, "Empire Firing Range," Canal Zone, Panama (NMNH).

DISTRIBUTION: Brazil, Colombia, Ecuador, French Guiana, Panama.

**albinensis** Bonne-Wepster and Bonne, 1920: 173 (♂ ♀ L). Figs. 2,3.

Lectotype ♂: Paramaribo, Surinam (ITH).

Bonne and Bonne-Wepster 1925: 298 (♂\*); Dyar 1928: 311 (♂\* ♀ L\*); Rozeboom and Komp 1950: 86 (♂\*); Lane 1953: 425 (♂\* ♀ L\*); Foote 1954: 16 (P\* L\*; tax.; Colombia); Galindo and Blanton 1955: 70 (Panama); Fauran 1956 (*in* Floch 1956: 219) (French Guiana); Cova Garcia, Sutil and Rausseo 1966a: 217 (♂\*; Venezuela); Belkin 1968: 12 (lectotype desig.); Duret 1969a: 7 (Paraguay); Sirivanakarn 1983: 280 (♂\* ♀\*); Mitchell and Darsie 1985: 284,

310 (Argentina); Forattini and Sallum 1987a: 153 ( $\delta^*$ ).

**DISTRIBUTION:** Argentina, Brazil, Colombia, French Guiana, Panama, Paraguay, Suriname, Venezuela.

*maroniensis* Bonne-Wepster and Bonne, 1920: 175 ( $\delta$ ). Holotype  $\delta$ : Surinam (ITH). Bonne and Bonne-Wepster 1925: 304 ( $\delta^*$ ); Rozeboom and Komp 1950: 92 ( $\delta^*$ ; tax.); Lane 1951: 334 (syn.); Belkin 1968: 17 (type info.).

*gordoni* Evans, 1924: 369 ( $\delta^*$ ). Holotype  $\delta$ : Bosque, Manaus [Manaus], Amazonas, Brazil (NHM). Dyar and Shannon 1925: 40 (syn.); Belkin 1968: 15 (type info.); Townsend 1990: 79 (type info.).

*alcocki* Bonne-Wepster and Bonne, 1920: 171 ( $\delta$  ♀ L; as *alcocki*). Fig. 4.

Lectotype  $\delta$ : Kabelstation, Surinam (ITH).

Bonne and Bonne-Wepster 1925: 290 ( $\delta^*$  ♀ L\*; as *alcocki*); Dyar 1928: 302 ( $\delta^*$  ♀ L\*; as *alcocki*); Rozeboom and Komp 1950: 86 ( $\delta^*$ ; as *alcocki*); Lane 1953: 456 ( $\delta$  ♀ L\*; as *alcocki*); Foote 1954: 18 (L\*; as *alcocki*); Belkin 1968: 12 (emend. to *alcocki*, lectotype desig., corrected type loc.); Fauran and Pajot 1974: 103 (French Guiana).

**DISTRIBUTION:** French Guiana, Suriname.

*aliciae* Duret, 1953: 75 ( $\delta^*$ ). Fig. 4; Note 3.

Holotype  $\delta$ : Misiones, Cerro Azul, (Arroyo San Juan), Argentina (NMNH).

Duret 1954: 106 ( $\delta^*$ ; type info.); Duret and Barreto 1956: 87 (Brazil); Belkin, Schick and Heinemann 1968: 16 (type info.); Duret 1969a: 7 (Paraguay); Peyton et al. 1983: 72 (Bolivia); Harbach, Gaffigan and Pecor 1991: 192 (type info.).

**DISTRIBUTION:** Argentina, Bolivia, Brazil, Paraguay.

*alogistus* Dyar, 1918b: 126 ( $\delta$  ♀). Figs. 4,5.

Lectotype  $\delta$ : Surinam (NMNH).

Dyar 1924b: 185 (Colombia); Bonne and Bonne-Wepster 1925: 308 ( $\delta$  ♀ L); Dyar 1928: 288 ( $\delta^*$  ♀; Panama); Rozeboom and Komp 1950: 87 ( $\delta^*$ ; tax., lectotype desig.); Lane 1953: 427 ( $\delta^*$  ♀); Foote 1954: 107 (P\* L\*; tax.); Stone



and Knight 1957: 42 (type info.); Galindo and Blanton 1955: 70 (Costa Rica); Stone 1961: 47 (French Guiana); Sutil Oramas 1980: 13 (Venezuela).

**DISTRIBUTION:** Brazil, Colombia, Costa Rica, French Guiana, Panama, Suriname, Venezuela.

*megapus* Root, 1927b: 595 ( $\delta^*$ ). Holotype  $\delta$  (genitalia only): Angra dos Reis, Rio de Janeiro, Brazil (NMNH). Dyar 1928: 288 ( $\delta^*$ ; syn.); Belkin, Schick and Heinemann 1971: 25 (type info.).

*alvaresi* Sutil Oramas, Pulido Florenzano and Amarista Meneses, 1987: 85 ( $\delta^*$ ; *Melanoconion*, *lapsus* for *Melanoconion*). Fig. 5.

Holotype  $\delta$ : Chiricoa, San Camilo, Apure, Venezuela (DERM).

**DISTRIBUTION:** Venezuela.

*amitis* Komp, 1936b: 333 ( $\delta^*$ ). Fig. 6.

Lectotype  $\delta$  (genitalia only): Quiriquire (near Maturin), [Monagas], Venezuela (NMNH).

Rozeboom and Komp 1950: 87 ( $\delta^*$ ); Lane 1953: 487 ( $\delta^*$ ); Stone and Knight 1957: 43 (lectotype desig.); Cova Garcia, Sutil and Rausseo 1966a: 187 ( $\delta^*$ ).

**DISTRIBUTION:** Venezuela.

*andricus* Root, 1927b: 592 ( $\delta^*$ ). Figs. 6,7.

Holotype  $\delta$ : Lassance, Minas Gerais, Brazil (NMNH).

Dyar 1928: 330 ( $\delta^*$ ); Rozeboom and Komp 1950: 87 ( $\delta^*$ ); Lane 1953: 469 ( $\delta^*$ ); Belkin, Schick and Heinemann 1971: 22 (type info.); Sirivanakarn 1983: 80 ( $\delta^*$ ).

**DISTRIBUTION:** Brazil.

*anips* Dyar, 1916: 48 ( $\delta$  ♀). Figs. 7,8.

Lectotype  $\delta$ : San Diego, California, United States (NMNH).

Dyar 1928: 299 ( $\delta^*$  ♀); Wirth 1945: 204 ( $\delta^*$ ); Rozeboom and Komp 1950: 87 ( $\delta^*$ ); Brookman and Reeves 1953: 231 (L\*; Mexico); Foote 1954: 20 (L\*);

Carpenter and LaCasse 1955: 301 ( $\delta^*$   $\varnothing$  L\*); Bohart and Washino 1957: 462 (L\*); Stone and Knight 1957: 43 (lectotype desig.); Sirivanakarn 1983: 280 ( $\delta^*$ ).

DISTRIBUTION: Mexico, United States.

**anoplicitus** Forattini and Sallum, 1989a: 1 ( $\delta^*$ ). Figs. 8,9.

Holotype  $\delta$ : Vilarinho, Itapitangui, Cananea, Sao Paulo, Brazil (FSP).

DISTRIBUTION: Brazil.

**arboricola** Galindo and Mendez, 1961: 3 ( $\delta^*$  P\* L\*; as *arboricolus*). Fig. 9; Note 4.

Holotype  $\delta$ : Cerro La Victoria, Panama (NMNH).

DISTRIBUTION: Panama.

**atratus** Theobald, 1901: 55 ( $\delta^*$ [habitus],  $\varnothing^*$ ). Figs. 9-13; Note 5.

Lectotype  $\delta$ : Ferry Swamp, Jamaica (NHM).

Theobald 1903: 239 (P\* L; Guyana, Brazil, Barbados, Saint Lucia); Dyar 1905a: 55 ( $\delta^*$ ); Dyar 1905b: 49 (type species desig. for *Melanocnion*); Theobald 1910: 456 (United States); Howard, Dyar and Knab 1913: Fig. 92 ( $\delta^*$  L\*); Howard, Dyar and Knab 1915: 388 ( $\delta$   $\varnothing$  L); Root 1922: 400 (Puerto Rico); Dyar 1923d: 187 ( $\delta^*$ ); Bonne and Bonne-Wepster 1925: 268 ( $\delta$   $\varnothing$  L; Surinam); Root 1927a: 464 (Haiti); Dyar 1928: 338 ( $\delta^*$   $\varnothing$  L\*; Cuba, Virgin Islands); Roth and Young 1944: 87 ( $\delta^*$  L); Matheson 1944: 216 ( $\delta^*$   $\varnothing$  L); Wirth 1945: 203 ( $\delta^*$ ); Carpenter, Middlekauff and Chamberlain 1946: 260 ( $\delta^*$   $\varnothing$  L\*); Hill and Hill 1948: 52 ( $\delta$   $\varnothing$  L); Rozeboom and Komp 1950: 87 ( $\delta^*$ ); Yamaguti and LaCasse 1951: 79 ( $\delta^*$   $\varnothing^*$  L\*); Yamaguti 1952: 29 ( $\delta^*$   $\varnothing^*$ ); Lane 1953: 473 ( $\delta^*$   $\varnothing$  P L\*; Panama); Foote 1954: 21 (P\* L\*; tax.); Carpenter and LaCasse 1955: 303 ( $\delta^*$   $\varnothing^*$  L\*); King et al. 1960: 109 (A L); Belkin 1968: 13 (lectotype desig.); Stone 1969: 6 (Dominica); Belkin, Heinemann and Page 1970: 78 ( $\delta^*$   $\varnothing^*$  P\* L\*); Knight and Haeger 1971: 553 ( $\varnothing^*$ ; tax.); Belkin and Heinemann 1973: 219 (Dominican Republic); Belkin and Heinemann 1975: 372, 377, 393 (Bahamas, Cayman Islands, Leeward Islands - Nevis); Belkin and Heinemann 1976a: 136, 148 (Leeward Islands - Antigua, Montserrat); Fize 1976: 18, 21, 27 (L\*; Martinique); Mattingly 1976: 225 (E\*); Sirivanakarn 1983: 269 ( $\delta^*$   $\varnothing^*$  P\* L\*); Townsend 1990: 47 (type info.).

**DISTRIBUTION:** Antigua, Bahamas, Barbados, Brazil, Cayman Islands, Cuba, Dominica, Dominican Republic, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, Montserrat, Nevis, Panama, Puerto Rico, Saint Lucia, Suriname, Trinidad, United States, Virgin Islands.

*falsificator* Dyar and Knab, 1909c: 257 (A). Lectotype ♂: Havana, Cuba (NMNH). Howard, Dyar and Knab 1913: Fig. 73 (♂\*); Howard, Dyar and Knab 1915: 425 (♂ ♀); Bonne and Bonne-Wepster 1925: 268 (syn.); Stone and Knight 1957: 49 (lectotype desig.).

*advieri* Senevet, 1938: 185 (♂\*). Holotype ♂: Prise d'Eau de Pointe-a-Pitre, Guadeloupe (MNHP). Floch and Abonnenc 1945a: 29 (♂\* L\*); Rozeboom and Komp 1950: 87 (syn.); Belkin 1968: 12 (type info.).

*aureonotatus* Duret and Barreto, 1956: 91 (♂\*). Fig. 13.

Holotype ♂: Fazenda Monte Alegre, Ribeirao Preto, Sao Paulo, Brazil (FMRP).

Belkin, Schick and Heinemann 1971: 22 (type info.).

**DISTRIBUTION:** Brazil.

*bahiensis* Duret, 1969b: 40 (♂\*). Figs. 13.

Holotype ♂: Urucuca, Bahia, Brazil (NMNH).

Stone 1970:162 (emend.); Harbach, Gaffigan and Pecor 1991: 192 (type info.).

**DISTRIBUTION:** Brazil.

*bastagarius* Dyar and Knab, 1906b: 170 (♂ L). Figs. 13-16; Note 6.

Lectotype ♂: Laventille, Trinidad (NMNH).

Howard, Dyar and Knab 1913: Figs. 88; 364 (♂\* L\*); Howard, Dyar and Knab 1915: 424 (♂ L); Bonne and Bonne-Wepster 1925: 302 (♂ ♀ L); Dyar 1928: 321 (♂\* L\*); Dyar 1928: 331 (♂\*; as *xivilis*, *lapsus* for *xivylis*); Komp 1936a: 64 (Colombia); Kumm, Komp and Ruiz 1940: 402 (Costa Rica); Anduze 1941: 14 (Venezuela); Kumm and Zuniga 1942: 407 (El Salvador); Levi Castillo 1949: 192 (Ecuador); Rozeboom and Komp 1950: 87 (♂\*; tax.); Martinez Palacios 1952: 83 (Mexico); Lane 1953: 434 (♂\* ♀ L\*); Duret 1953: 70 (♂\*; Argentina); Duret 1954: 108 (♂\*); Foote 1954: 23 (P\* L\*; tax.); Stone and Knight 1957: 44



**bejaranoi** Duret, 1953: 75 ( $\delta^*$ ). Fig. 17; Note 3.

Holotype  $\delta$ : Bernardo de Irigoyen, Misiones, Argentina (NMNH).

Duret 1954: 109 ( $\delta^*$ ; type info.); Belkin, Schick and Heinemann 1968: 16 (type info.); Harbach, Gaffigan and Pecor 1991: 192 (type info.).

DISTRIBUTION: Argentina.

**bequaerti** Dyar and Shannon, 1925: 39 ( $\delta$  ♀). Fig. 17.

Holotype  $\delta$ : Sororoca, Rio Branca, Amazonas, Brazil (NMNH).

Dyar 1928: 298 ( $\delta^*$  ♀); Rozeboom and Komp 1950: 88 ( $\delta^*$ ); Lane 1953: 474 ( $\delta^*$  ♀).

DISTRIBUTION: Brazil.

**bifoliolatus** Duret and Barreto, 1956: 96 ( $\delta^*$ ). Fig. 18.

Holotype  $\delta$ : Fazenda Monte Alegre, Ribeirao Preto, Sao Paulo, Brazil (FMRP).

Belkin, Schick and Heinemann 1971: 23 (type info.).

DISTRIBUTION: Brazil.

**carcinophilus** Dyar and Knab, 1906a: 220 ( $L^*$ ). Fig. 18.

Lectotype  $Le$  (with associated  $Pe$   $\delta$ ): San Domingo City, Santo Domingo [Ciudad Trujillo, Dominican Republic] (NMNH).

Howard, Dyar and Knab 1913: Figs. 85, 368, 592 ( $\delta^*$   $L^*$ ); Howard, Dyar and Knab 1915: 412 ( $\delta$  ♀  $L$ ); Root 1927a: 464 (Haiti); Dyar 1928: 319 ( $\delta^*$  ♀  $L^*$ ); Martini 1935: 61 (Guatemala); Tulloch 1937: 148 (Puerto Rico); Rozeboom and Komp 1950: 88 ( $\delta^*$ ; tax.); Lane 1953: 475 ( $\delta^*$  ♀  $P^*$   $L^*$ ); Foote 1954: 29 ( $P^*$   $L^*$ ); Stone and Knight 1957: 45 (lectotype desig.); Garcia Avila 1976: 9 (Cuba).

DISTRIBUTION: Cuba, Dominican Republic, Guatemala, Haiti, Puerto Rico.



1969b: 68 (syn. with *opisthopus*); Mattingly 1976: 228 (E\*); Cupp 1986 (in Weaver et al. 1986: 619) (resurrected from syn.).

DISTRIBUTION: United States.

**changuinolae** Galindo and Blanton, 1954: 238 ( $\delta^*$ ). Fig. 22.

Holotype  $\delta$ : Almirante, Bocas del Toro, Panama (NMNH).

DISTRIBUTION: Panama.

**clarki** Evans, 1924: 365 ( $\delta^*$ ). Figs. 22,23.

Lectotype  $\delta$ : Manaus, Amazonas, Brazil (NHM).

Dyar 1928: 297 ( $\delta^*$ ); Edwards 1932: 216 (syn. with *nigrescens*); Komp 1935: 4 (resurrected from syn.); Rozeboom and Komp 1950: 93 ( $\delta^*$ ; syn. with *nigrescens*); Lane 1951: 334 (revalidated); Lane 1953: 480 (syn. with *nigrescens*); Casal 1963: 317 ( $\delta^*$ ; resurrected from syn., Argentina); Belkin 1968: 14 (lectotype desig.); Duret 1969a: 7 (Paraguay); Belkin, Schick and Heinemann 1971: 24 (type loc. info.); Sirivanakarn 1983: 279 ( $\delta^*$ ); Townsend 1990: 61 (type info.).

DISTRIBUTION: Argentina, Brazil, Paraguay, Venezuela (Appendix I).

**comatus** Senevet and Abonnenc, 1939: 103 ( $\delta^*$  L\*). Fig. 23.

Holotype  $\delta$ : Crique Mangué, Saut-Tigre, [Inini], French Guiana (NE).

Rozeboom and Komp 1950: 88 ( $\delta^*$ ; Colombia); Lane 1953: 415 ( $\delta^*$  L\*); Foote 1954: 33 (L\*; tax.); Belkin 1968: 53 (type info.); Heinemann and Belkin 1979: 80 (Brazil).

DISTRIBUTION: Brazil, Colombia, French Guiana.

**commevynensis** Bonne-Wepster and Bonne, 1920: 176 ( $\delta$ ). Fig. 24.

Holotype  $\delta$ : Alkmaar, [Commewijne], Surinam (ITH).

Dyar 1923d: 188 ( $\delta^*$ ); Bonne and Bonne-Wepster 1925: 271 ( $\delta^*$ ); Dyar 1928: 340 ( $\delta^*$ ); Rozeboom and Komp 1950: 89 ( $\delta^*$ ; tax., Colombia, Panama); Lane 1953: 440 ( $\delta^*$  P\* L\*); Foote 1954: 34 (P\* L\*; tax.); Fauran 1961b: 35 (French Guiana); Belkin 1968: 14 (tax., type info.); Sirivanakarn 1983: 279 ( $\delta^*$ ).

**DISTRIBUTION:** Colombia, French Guiana, Panama, Suriname.

**comminutor** Dyar, 1920a: 70 ( $\delta$ ). Figs. 24,25.

Holotype  $\delta$  (genitalia only): near Paramaribo, Surinam (NMNH).

Dyar 1928: 322 ( $\delta^*$ ); Senevet and Abonnenc 1939: 88 ( $\delta^*$  L; French Guiana); Rozeboom and Komp 1950: 89 ( $\delta^*$ ; tax.); Lane 1953: 458 ( $\delta^*$  L); Foote 1954: 36 (L; tax.); Baretto-Reyes 1955: 61 (Colombia); Galindo and Blanton 1955: 70 (Panama); Duret and Barreto 1956: 86 (Brazil); Stone, Knight and Starcke 1959: 268 (Ecuador); Stone 1961: 46 (Trinidad); Sirivanakarn 1983: 279 ( $\delta^*$ ).

**DISTRIBUTION:** Brazil, Colombia, Ecuador, French Guiana, Panama, Suriname, Trinidad.

**confundior** Komp and Rozeboom, 1951: 132 ( $\delta^*$ ). Fig. 25.

Holotype  $\delta$  (genitalia only): Paramaribo, Surinam (NMNH).

**DISTRIBUTION:** Suriname.

**conspirator** Dyar and Knab, 1906a: 217 (L\*). Figs. 25-27.

Lectotype Le (with associated Pe  $\varnothing$ ): Almoloya, Oaxaca, Mexico (NMNH).

Howard, Dyar and Knab 1913: Figs. 70, 346, 591 ( $\delta^*$  L\*); Howard, Dyar and Knab 1915: 412 ( $\delta$   $\varnothing$  L); Dyar 1925b: 28 (Ecuador); Dyar 1928: 306 ( $\delta^*$   $\varnothing$  L\*); Aguilar 1931: 10 (El Salvador); Komp 1935: 5 ( $\delta$ ); Rozeboom and Komp 1950: 89 ( $\delta^*$ ); Lane 1953: 460 ( $\delta^*$   $\varnothing$  P\* L\*); Foote 1954: 37 (L\*; Honduras); Stone and Knight 1957: 46 (lectotype desig.); Cova Garcia, Sutil and Rausseo 1966a: 205 ( $\delta^*$ ); Cova Garcia, Sutil and Rausseo 1966b: 149 (L\*); Heinemann and Belkin 1977b: 428, 453 (Guatemala, Nicaragua); Heinemann, Aitken and Belkin 1980: 201, 204, 207 (Trinidad, Tobago); Sirivanakarn 1983: 280 ( $\delta^*$   $\varnothing^*$ ).

**DISTRIBUTION:** Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Tobago, Trinidad, Venezuela.

**holoneus** Dyar, 1921a: 35 ( $\delta$ ). Holotype  $\delta$ : Orotina, Costa Rica (NMNH).  
Dyar 1928: 301 ( $\delta^*$ ); Komp 1935: 4 (syn.); Belkin, Schick and Heinemann 1965: 13 (type loc. info).

**dysmathes** Dyar and Ludlow, 1921: 47 ( $\delta$   $\varnothing$ ). Lectotype  $\delta$ : Cativa, Canal



Zone, Panama (NMNH). Dyar 1923a: 69 (syn.); Stone and Knight 1957: 48 (lectotype desig.).

*pasadaemon* Dyar, 1921c: 100 (♂). Holotype ♂: San Jose, Costa Rica (NMNH). Dyar 1923a: 69 (syn.).

*merodaemon* Dyar, 1921c: 100 (♂). Holotype ♂: Orotina, Costa Rica (NMNH). Dyar and Shannon 1924a: 47 (syn.); Stone and Knight 1957: 53 (type info.).

*fatuator* Dyar and Shannon, 1924a: 47 (♂). Holotype ♂: Cardenas River, Canal Zone, Panama (NMNH). Dyar 1928: 306 (♂\* ♀); Komp 1935: 5 (syn.).

*meroneus* Dyar, 1925a: 22 (♂). Holotype ♂: Barranquilla, [Magdalena], Colombia (NMNH). Dyar 1925c: 172 (syn. with *holoneus*).

*macaronensis* Dyar and Nunez Tovar, 1927: 153 (♂). Holotype ♂ (genitalia only): Macaro, Venezuela (NMNH). Dyar 1928: 309 (♂\*); Komp 1935: 5 (syn.).

*inducens* Root, 1928 (*in* Dyar 1928: 307) (♂ ♀). Lectotype ♂: [Maracay, Aragua], Venezuela (NMNH). Komp 1935: 5 (syn.); Stone and Knight 1957: 51 (lectotype desig.).

*contei* Duret, 1968c: 121 (♂\*). Fig. 27.

Holotype ♂: Sao Miguel do Guama, Para, Brazil (NMNH).

Heinemann, Aitken and Belkin 1980: 182-184, 213 (Trinidad); Harbach, Gaffigan and Pecor 1991: 193 (type info.).

DISTRIBUTION: Brazil, French Guiana, Panama, Trinidad.

*seneveti* Clastrier, 1970a: 464 (♂\*). Holotype ♂: Foret de Cabassou, Cayenne, French Guiana (MNHP). Sirivanakarn 1983: 274 (syn.).

*coppenamensis* Bonne-Wepster and Bonne, 1920: 173 (♂ L). Fig. 28.

Lectotype ♂: Kabelstation, Surinam (ITH).

Bonne and Bonne-Wepster 1925: 300 (♂\* L\*); Dyar 1928: 314 (♂\* L\*); Anduze 1941: 15 (Venezuela); Abonnenc 1946 (*in* Floch 1946: 122) (French Guiana); Rozeboom and Komp 1950: 89 (♂\*); Lane 1953: 413 (♂\* L\*); Foote

1954: 38 (L\*); Cova Garcia, Sutil and Rausseo 1966a: 163 ( $\delta^*$ ); Belkin 1968: 14 (lectotype desig.); Heinemann and Belkin 1978b: 524 (Colombia); Sirivanakran 1983: 280 ( $\delta^*$ ).

DISTRIBUTION: Colombia, French Guiana, Suriname, Venezuela.

*corentynensis* Dyar, 1920a: 65 ( $\delta$ ). Fig. 29.

Lectotype  $\delta$ : Suriname (NMNH).

Dyar 1928: 315 ( $\delta^*$ ); Rozeboom and Komp 1950: 89 ( $\delta^*$ ; lectotype desig.); Lane 1953: 477 ( $\delta^*$ ); Knight and Stone 1957: 46 (type info.); Fauran 1961b: 35 (French Guiana).

DISTRIBUTION: French Guiana, Suriname.

*creole* Anduze, 1949b: 149 ( $\delta^*$ ). Figs. 29,30.

Holotype  $\delta$ : Caripito, Monagas, Venezuela (FSP).

Cova Garcia, Sutil and Rausseo 1966a: 219 ( $\delta^*$ ); Clastrier 1968: 225 ( $\delta^*$ ; French Guiana); Heinemann and Belkin 1978b: 538 (Colombia); Heinemann and Belkin 1979: 94 (Brazil); Forattini, Rabello and Cotrim 1970: 39 (type info.); Sirivanakarn 1983: 280 ( $\delta^*$ ).

DISTRIBUTION: Brazil, Colombia, French Guiana, Venezuela.

*cristovaoi* Duret, 1968a: 14 ( $\delta^*$ ). Fig. 30.

Holotype  $\delta$ : Caracarai, Roraima, Brazil (NMNH).

Fauran and Pajot 1974: 104 (French Guiana); Harbach, Gaffigan and Pecor 1991: 19<sup>o</sup> (type info.).

DISTRIBUTION: Brazil, French Guiana.

*crybda* Dyar, 1924b: 184 ( $\delta$ ). Fig. 31; Notes 2,7.

Holotype  $\delta$ : Atrato River, Murindo (Antioquia), Colombia (NMNH).

Dyar 1928: 293 (syn. with *taeniopus*); Lane 1953: 403 ( $\delta$ ; Brazil, Venezuela); Stone 1961: 46 (Trinidad); Belkin, Schick and Heinemann 1965: 9 (type loc. info.); Galindo 1969: 87 (syn. with *epanastasis*); Heinemann and Belkin 1978:

131 (Panama); Sirivanakarn and Belkin 1980: 11 (♂; resurrected from syn.); Sirivanakarn 1983: 279 (♀\*).

DISTRIBUTION: Brazil, Colombia, Panama, Trinidad, Venezuela.

*delpontei* Duret, 1969a: 8 (♂\*). Figs. 31,32.

Holotype ♂: Las Palmas, Chaco, Argentina (NMNH).

Duret 1953: 75 (♂\*; as *paracrybda*); Duret 1954: 119 (♂\*; as *paracribda*, *lapsus* for *paracrybda*); Forattini and Sallum 1989b: 473 (♂\* ♀\*; Brazil); Harbach, Gaffigan and Pecor 1991: 193 (type info.).

DISTRIBUTION: Argentina, Brazil, Paraguay.

*distinguendus* Dyar, 1928: 305 (♂ ♀). Fig. 32.

Lectotype ♂: Mojinga Swamp, Canal Zone, Panama (NMNH).

Komp 1936a: 64 (Colombia); Levi Castillo 1949: 192 (Ecuador); Rozeboom and Komp 1950: 89 (♂\*; lectotype desig.); Lane 1951: 334 (syn. with *comminutor*); Foote 1954: 41 (L\*; resurrected from syn., Brazil); Stone and Knight 1957: 47 (type info.); Stone, Knight and Starcke 1959: 269 (Costa Rica); Fauran and Pajot 1974: 104 (French Guiana).

DISTRIBUTION: Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Panama.

*dolichophyllus* Clastrier, 1970b: 858 (♂\*). Fig. 32.

Holotype ♂: Foret de Cabassou, Cayenne, French Guiana (MNHP).

DISTRIBUTION: French Guiana.

*dunni* Dyar, 1918b: 123 (♂ ♀). Figs. 32,33.

Lectotype ♂: Mandingo River, [Canal Zone], Panama (NMNH).

Dyar 1923d: 188 (♂\*); Dyar 1924b: 183 (Colombia); Bonne and Bonne-Wepster 1925: 267 (♂ ♀; Suriname); Dyar 1928: 340 (♂\* ♀ L\*); Komp 1935: 8 (♂; tax.); Senevet and Abonnenc 1939: 80 (French Guiana); Anduze 1941: 16 (Venezuela); Levi Castillo 1949: 192 (Ecuador); Rozeboom and Komp 1950: 89 (♂\*; type loc. info.); Martinez Palacios 1952: 83 (Mexico); Foote 1954: 42

(P\* L\*; tax.); Stone and Knight 1957: 48 (lectotype desig.); Stone 1961: 46 (Trinidad); Cova Garcia, Sutil and Rausseo 1966a: 177 (♂\*); Forattini 1965: 182 (♂\* L\*); Duret 1969a: 7 (Paraguay); Heinemann and Belkin 1977a: 283 (Costa Rica); Bertram 1971: 745 (Belize); Sirivanakarn 1983: 279 (A\*).

DISTRIBUTION: Belize, Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Mexico, Nicaragua (Appendix I), Panama, Paraguay, Suriname, Trinidad, Venezuela.

*ruffinis* Dyar and Shannon, 1924b: 143 (♂). Holotype ♂: Barro Colorado Island, Gatun Lake, Canal Zone, Panama (NMNH). Dyar 1928: 341 (♂\* ♀); Komp 1935: 8 (syn.).

*exedrus* Root, 1927b: 580 (♂\* ♀). Lectotype ♂: Porto das Caixas, Rio de Janeiro, Brazil (NMNH). Dyar 1928: 341 (syn. with *ruffinis*); Stone and Knight 1957: 49 (lectotype desig.).

*dureti* Casal and Garcia, 1968b: 123 (♂\*). Fig. 33.

Holotype ♂: San Ignacio, Misiones, Argentina (INM).

Heinemann and Belkin 1979: 80 (Brazil).

DISTRIBUTION: Argentina, Brazil, Paraguay, Venezuela (Appendix I).

*dyius* Root, 1927b: 587 (♂\*). Fig. 34.

Holotype ♂ (genitalia only): Brazil ("Probably obtained in the costal lowlands of the state of Rio de Janeiro") (NMNH).

Dyar 1928: 308 (♂\*; syn. with *elevator*); Rozeboom and Komp 1950: 90 (♂\*; resurrected from syn., type info.); Fauran and Pajot 1974: 105 (French Guiana); Sirivanakarn 1983: 280 (♂\*).

DISTRIBUTION: Brazil, French Guiana.

*eastor* Dyar, 1920a: 71 (♂). Figs. 34,35.

Holotype ♂: Surinam (NMNH).

Dyar 1924b: 184 (Colombia); Dyar 1928: 323 (♂\* ♀); Komp 1935: 7 (Panama); Martini 1935: 61 (Guatemala); Abonnenc 1946 (*in* Floch 1946: 122) (French Guiana); Levi Castillo 1949: 192 (Ecuador); Rozeboom and Komp



*aneles* Dyar and Ludlow, 1922: 63 ( $\delta^*$  ♀). Lectotype  $\delta$ : Cardenas River, Canal Zone, Panama (NMNH). Dyar 1928: 325 (syn.); Stone and Knight 1957: 43 (lectotype desig.).

*egcymon* Dyar, 1923a: 67 ( $\delta^*$  ♀). Figs. 37,38.

Lectotype  $\delta$ : Tabernilla, Canal Zone, Panama (NMNH).

Dyar 1928: 292 ( $\delta^*$  ♀ L\*); Rozeboom and Komp 1950: 90 ( $\delta^*$ ); Lane 1953: 417 ( $\delta^*$  ♀ L\*); Foote 1954: 48 (L\*); Stone and Knight 1957: 48 (lectotype desig.); Heinemann and Belkin 1977a: 283 (Costa Rica); Sirivanakarn 1983: 280 ( $\delta^*$ ).

DISTRIBUTION: Colombia (Appendix I), Costa Rica, Panama.

*elephas* Komp, 1936b: 328 ( $\delta^*$ ). Fig. 38.

Holotype  $\delta$ : Juan Diaz, Panama (NMNH).

Rozeboom and Komp 1950: 90 ( $\delta^*$ ); Lane 1953: 417 ( $\delta^*$ ); Heinemann and Belkin 1978a: 394 (Venezuela); Sirivanakarn 1983: 280 (A\*).

DISTRIBUTION: Panama, Venezuela.

*elevator* Dyar and Knab, 1906a: 217 (L\*). Figs. 38-40; Note 5.

Lectotype Le (with associated Pe ♀): Puerto Limon, Costa Rica (NMNH).

Howard, Dyar and Knab 1913: Figs. 76, 354, 593 ( $\delta^*$  L\*); Howard, Dyar and Knab 1915: 414 ( $\delta$  ♀ L); Dyar 1928: 308 ( $\delta^*$  ♀ L\*); Aguilar 1931: 10 (El Salvador); Komp 1935: 5 (tax.); Komp 1936a: 64 (Colombia); Wirth 1945: 200 ( $\delta^*$ ; United States); Levi Castillo 1949: 192 (Ecuador); Rozeboom and Komp 1950: 91 ( $\delta^*$ ); Yamaguti and LaCasse 1951: 83 ( $\delta^*$  ♀ L\*); Yamaguti 1952: 29 ( $\delta^*$  ♀\*); Martinez Palacios 1952: 84 (Mexico); Lane 1953: 447 ( $\delta^*$  ♀ L\*); Duret 1953: 70 ( $\delta$ ; Argentina); Duret 1954: 113 ( $\delta$ ); Foote 1954: 49 (P\* L\*; Brazil, Puerto Rico); Stone and Knight 1957: 48 (lectotype desig.); Fauran 1961b: 35 (French Guiana); Cova Garcia, Sutil and Rausseo 1966a: 193 ( $\delta^*$ ); Cova Garcia, Sutil and Rausseo 1966b: 191 (L\*); Stone 1969: 6 (Dominica); Heinemann and Belkin 1977b: 442, 453 (Honduras, Nicaragua); Sirivanakarn 1983: 280 (♀\*).

DISTRIBUTION: Argentina, Brazil, Colombia, Costa Rica, Dominica,

Ecuador, El Salvador, French Guiana, Guadeloupe, Guatemala (Appendix I), Honduras, Mexico, Nicaragua, Panama, Puerto Rico, United States, Venezuela.

*domarum* Dyar and Shannon, 1924a: 46 (♂). Holotype ♂: Sweet Water Reservoir, Fort Sherman, Canal Zone, Panama (NMNH). Dyar 1928: 308 (♂\* ♀); Komp 1935: 5 (syn.).

*curryi* Dyar, 1926: 112 (♂ ♀ L). Lectotype ♂: Mojinga River Swamp, Canal Zone, Panama (NMNH). Dyar 1928: 324 (♂\* ♀\* L\*); Komp 1935: 7 (syn.); Stone and Knight 1957: 46 (lectotype desig.).

*bonneti* Senevet, 1938: 187 (♂\*). Holotype ♂: Pointe-a-Pitre, Guadeloupe Island, Lesser Antilles (MNHP). Rozeboom and Komp 1950: 91 (syn.); Belkin 1968: 13 (type info.).

*vogelsangi* Anduze, 1949a: 61 (♂\*). Holotype ♂ (genitalia only): Caripito, Monagas, Venezuela (FSP). Lane 1953: 448 (syn.); Forattini, Rabello and Cotrim 1970: 50 (type info.).

*ensiformis* Bonne-Wepster and Bonne, 1920: 176 (♂ ♀ L). Figs. 40,41; Note 9.

Lectotype ♂: Dam, Surinam (ITH).

Bonne and Bonne-Wepster 1925: 272 (♂\* ♀ L); Senevet and Abonnenc 1939: 81 (♂\* L\*; French Guiana); Rozeboom and Komp 1950: 98 (syn. with *zeteki*); Foote 1954: 97 (P\* L\*; as *zeteki*); Belkin 1968: 15 (resurrected from syn., lectotype desig., type info.); Peyton et al. 1983: 72 (Bolivia).

DISTRIBUTION: Bolivia, French Guiana, Suriname.

*epanastasis* Dyar, 1922: 191 (♂\*). Fig. 41; Note 2.

Holotype ♂: Arenal River, Toro Point, Canal Zone, Panama (NMNH).

Dyar 1928: 296 (♂\*); Komp 1935: 4 (syn. with *taeniopus*); Galindo 1969: 86 (resurrected from syn.); Heinemann and Belkin 1977b: 453 (Nicaragua); Heinemann and Belkin 1978a: 408 (French Guiana); Sirivanakarn and Belkin 1980: 10 (tax.).

DISTRIBUTION: French Guiana, Nicaragua, Panama.

*pseudotaeniopus* Galindo and Blanton, 1954: 240 ( $\delta^*$  P\* L\*). Holotype  $\delta$ : Mojinga Swamp, Canal Zone, Panama (NMNH). Galindo 1969: 88 (tax.); Sirivanakarn and Belkin 1980: 11 (syn.).

*equinoxialis* Floch and Abonnenc, 1945c: 3 ( $\delta^*$ ). Figs. 41,42; Note 10.

Holotype  $\delta$ : Camp Rochambeau, French Guiana (NE).

Rozeboom and Komp 1950: 91 ( $\delta^*$ ); Belkin 1968: 15 (type info.); Harrison 1973: 277 (type info.).

DISTRIBUTION: Brazil (Appendix I), French Guiana.

*ernanii* Duret, 1968e: 74 ( $\delta^*$ ). Fig. 42.

Holotype  $\delta$ : Boa Vista, Roraima, Brazil (NMNH).

Harbach, Gaffigan and Pecor 1991: 193 (type info.).

DISTRIBUTION: Brazil.

*ernsti* Anduze, 1949a: 63 ( $\delta^*$ ). Figs. 42,43.

Holotype  $\delta$ : Caripito, Monagas, Venezuela (FSP).

Cova Garcia, Sutil and Rausseo 1966a: 40 ( $\delta^*$ ); Cova Garcia, Sutil and Rausseo 1966b: 225 (L\*); Forattini, Rabello and Cotrim 1970: 40 (type info.); Sirivanakarn 1983: 280 ( $\delta^*$ ).

DISTRIBUTION: Venezuela.

*erraticus* (Dyar and Knab, 1906a: 224) (L\*; *Mochlostyrax*). Figs. 43-46.

Lectotype Lc: Baton Rouge, Louisiana, United States (NMNH).

Howard, Dyar and Knab 1913: Figs. 349, 588, 689 (L\* E\*); Dyar 1928: 299 (in part,  $\delta^*$  L\*;  $\delta^*$  as *abominator*); King and Bradley 1937: 345 ( $\delta^*$  L\*; tax.); Floch and Abonnenc 1942: 6 (French Guiana); Roth 1943: 124 ( $\delta^*$ ); Roth and Young 1944: 86 ( $\delta^*$ ); Michener 1944: 263 ( $\delta^*$ ); Wirth 1945: 204 ( $\delta^*$ ); Rozeboom 1942: 40 ( $\delta^*$   $\delta^*$  L); Carpenter, Middlekauff and Chamberlain 1946: 262 ( $\delta^*$ ); Hill and Hill 1948: 54 (Jamaica); van der Kuyp 1949: 69 (Netherlands Antilles - Curacao); Rozeboom and Komp 1950: 91 ( $\delta^*$ ); Yamaguti and LaCasse 1951: 87 ( $\delta^*$   $\delta^*$  L\*); Yamaguti 1952: 29 ( $\delta^*$   $\delta^*$ );



Lane 1953: 492 ( $\delta^*$  ♀ L\*); Foote 1954: 51 (L\* P\*; Brazil, Nicaragua, Honduras, Cuba, Mexico); van der Kuyp 1954: 39 ( $\delta$  ♀ L\*; bionomics); Barreto-Reyes 1955: 63 (Colombia); Carpenter and LaCasse 1955: 305 ( $\delta^*$  ♀ L\*); Stone and Knight 1957: 49 (lectotype desig.); Barr 1958: 128 ( $\delta^*$  ♀ L\*); Stone, Knight and Starcke 1959: 270 (Dominican Republic); King et al. 1960: 110 (A L); Ross and Horsfall 1965: 22, 40 ( $\delta^*$  L\*); Flemings and Walsh 1966: 424 (Virgin Islands); Cova Garcia, Sutil and Rausseo 1966a: 197 ( $\delta^*$ ); Duret 1969a: 7 (Paraguay); Belkin, Heinemann and Page 1970: 84 ( $\delta^*$  ♀ L\* P\*); Knight and Haeger 1971: 553 (♀\*; tax.); Bertram 1971: 745 (Belize); Panday 1975a: 144 (Suriname); Belkin and Heinemann 1975: 388 (Haiti); Mattingly 1976: 226 (E\*); Heinemann and Belkin 1977a: 283 (Costa Rica); Heinemann and Belkin 1977b: 428, 433, (Guatemala, El Salvador); Sirivanakarn 1978a: 244 ( $\delta^*$ ); Heinemann and Belkin 1979: 107, 113 (Ecuador, Peru); Heinemann, Aitken and Belkin 1980: 197 (Trinidad); Sirivanakarn 1983: 279 ( $\delta^*$  ♀\*); Townsend 1990: 143 (type info.).

**DISTRIBUTION:** Belize, Brazil, Colombia, Costa Rica, Cuba, Curacao, Dominican Republic, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Trinidad, United States, Venezuela, Virgin Islands.

*leprincei* Dyar and Knab, 1907c: 202 ( $\delta$  ♀). Lectotype  $\delta$ : Tabernilla, Canal Zone, Panama (NMNH). Howard, Dyar and Knab 1913: Figs. 84, 353 ( $\delta^*$  L\*); Howard, Dyar and Knab 1915: 397 ( $\delta$  ♀ L); King and Bradley 1937: 345 (syn.); Stone and Knight 1957: 52 (lectotype desig.).

*egberti* Dyar and Knab, 1907d: 214 (♀). Lectotype ♀: Warner's Camp, Lake Okeechobee, Florida, United States (NMNH). King and Bradley 1937: 345 (syn.); Stone and Knight 1957: 48 (lectotype desig.).

*trachycampa* Dyar and Knab, 1909b: 101 ( $\delta$  ♀). Lectotype  $\delta$ : Las Cascadas, Canal Zone, Panama (NMNH). Howard, Dyar and Knab 1913: Figs. 72, 363, 588, ( $\delta^*$  L\*); Howard, Dyar and Knab 1915: 329 ( $\delta$  ♀ L); Dyar 1918a: 105 (syn. with *leprincei*); King and Bradley 1937: 346 (tax.); Stone and Knight 1957: 57 (lectotype desig.).

*peribleptus* Dyar and Knab, 1918: 181 ( $\delta$  ♀). Lectotype  $\delta$ : Parr Shoals, South Carolina, United States (NMNH). King and Bradley 1937: 346 (syn.); Stone and Knight 1957: 54 (lectotype desig.).

*pose* Dyar and Knab, 1918: 182 (♀). Holotype ♀: Dallas, Texas, United States (NMNH). King and Bradley 1937: 346 (syn.).

*moorei* Dyar, 1918a: 108 (♀). Lectotype ♂: Plantation Plaisance, Demerara, British Guiana [Georgetown, Guyana] (NMNH). King and Bradley 1937: 346 (syn.); Stone and Knight 1957: 53 (lectotype desig.).

*degustator* Dyar, 1921b: 39 (♂). Lectotype ♂: Scott, Arkansas, United States (NMNH). King and Bradley 1937: 346 (syn.); Stone and Knight 1957: 47 (lectotype desig.).

*homoepas* Dyar and Ludlow, 1921: 46 (♂). Holotype ♂: Jackson Barracks, New Orleans, Louisiana, United States (NMNH). King and Bradley 1937: 346 (syn.).

*borinqueni* Root, 1922: 400 (♂\* ♀ L\*). Lectotype ♂: Rio Piedras, [San Juan], Puerto Rico (NMNH). King and Bradley 1937: 346 (syn.); Stone and Knight 1957: 44 (lectotype desig.).

*tovari* Evans, 1924: 367 (♂\*). Holotype ♂: Palo Negro, [Aragua], Venezuela (NHM). King and Bradley 1937: 346 (syn.); Belkin 1968: 21 (type info.); Townsend 1990: 143 (type info.).

*evansae* Root, 1927b: 593 (♂\* L\*). Figs. 46,47; Note 11.

Lectotype ♂: Mage, Rio de Janeiro, Brazil (NMNH).

Dyar 1928: 320 (♂\* ♀ L\*); Senevet and Abonnenc 1939: 86 (♂\* L\*; French Guiana); Rozeboom and Komp 1950: 91 (♂\*; lectotype desig., type loc. info.); Lane 1953: 442 (♂\* ♀ P\* L\*); Foote 1954: 54 (L\*); Galindo and Blanton 1955: 71 (Panama); Stone and Knight 1957: 49 (type info.); Stone 1961: 46 (Trinidad); Heinemann and Belkin 1979: 107 (Ecuador).

DISTRIBUTION: Brazil, Ecuador, French Guiana, Panama, Trinidad.

*fairchildi* Galindo and Blanton, 1954: 234 (♂\*). Fig. 47.

Holotype ♂: Patino Point, Darien, Panama (NMNH).

Sutil Oramas 1980: 14 (Venezuela).

DISTRIBUTION: Brazil (Appendix I), Panama, Venezuela.

**faurani** Duret, 1968e: 77 ( $\delta^*$ ). Fig. 48.

Holotype  $\delta$ : Manaus, Amazonas, Brazil (NMNH).

Galindo 1969: 88 (tax.); Harbach, Gaffigan and Pecor 1991: 193 (type info.).

DISTRIBUTION: Brazil, French Guiana.

**ferreri** Duret, 1968e: 79 ( $\delta^*$ ). Fig. 48.

Holotype  $\delta$ : Agualasal, Cucuta, Norte de Santander, Colombia (NMNH).

Harbach, Gaffigan and Pecor 1991: 193 (type info.).

DISTRIBUTION: Colombia, Venezuela.

**flabellifer** Komp, 1936b: 323 ( $\delta^*$ ). Figs 48,49.

Holotype  $\delta$ : Santa Rosa, Colon, Panama (NMNH).

Rozeboom and Komp 1950: 91 ( $\delta^*$ ; Mexico); Lane 1953: 456 ( $\delta^*$ ); Galindo and Blanton 1955: 71 (Honduras); Belkin, Heinemann and Page 1970: 89 (corrected distribution); Fauran and Pajot 1974: 105 (French Guiana).

DISTRIBUTION: French Guiana, Guatemala (Appendix I), Honduras, Mexico, Panama, Venezuela (Appendix I).

**foliafer** Komp and Rozeboom, 1951: 121 ( $\delta^*$ ). Fig. 49.

Holotype  $\delta$ : Surinam (NMNH).

Rozeboom and Komp 1950: 93 ( $\delta^*$ ; as species A); Foote 1954: 111 (P\* L\*; tax.); Galindo and Blanton 1955: 71 (Panama); Clastrier 1968: 227 ( $\delta^*$ ; French Guiana).

DISTRIBUTION: French Guiana, Panama, Suriname.

**galindoi** Komp and Rozeboom, 1951: 131 ( $\delta^*$ ). Fig. 50.

Holotype  $\delta$ : Quebrada Escondida, Rio Pequeni, Colon, Panama (NMNH).

DISTRIBUTION: Panama.

**galvaol** Duret, 1968b: 60 ( $\delta^*$ ). Fig. 50.

Holotype  $\delta$ : Chere, Rio de Janeiro, Brazil (NMNH).

Harbach, Gaffigan and Pecor 1991: 193 (type info.).

DISTRIBUTION: Brazil.

**garcesi** Duret, 1968b: 63 ( $\delta^*$ ). Fig. 50.

Holotype  $\delta$ : Quibdo, Choco, Colombia (NMNH).

Heinemann and Belkin 1977a: 284 (Costa Rica); Harbach, Gaffigan and Pecor 1991: 193 (type info.).

DISTRIBUTION: Colombia, Costa Rica.

**glyptosalpinx** Harbach, Peyton and Harrison, 1984: 185 ( $\delta^*$   $\text{♀}^*$   $\text{P}^*$   $\text{L}^*$ ). Figs. 50, 51.

Holotype  $\delta^*$ : Santa Cruz, Sandoval, Rincon del Tigre, Bolivia (NMNH).

Duret 1953: 70 ( $\delta^*$ ; as *intrincatus*); Duret 1954: 114 ( $\delta^*$ ; as *intrincatus*);  
Duret and Barreto 1956: 86 ( $\delta^*$ ; as *intrincatus*).

DISTRIBUTION: Argentina, Bolivia, Brazil, Paraguay.

**guedesi** da Silva Mattos and Xavier, 1991: 193 ( $\delta^*$ ). Fig. 119.

Holotype  $\delta$ : Lagoa dos Mares, Municipio de Lagoa Santa, Estado de Minas Gerais, Brazil (FSP).

DISTRIBUTION: Brazil.

**herrerai** Sutil Oramas, Pulido Florenzano and Amarista Meneses, 1987: 81 ( $\delta^*$ ).  
Fig. 51.

Holotype  $\delta$ : Jabilla, Queseras del Medio, Apure, Venezuela (DERM).

DISTRIBUTION: Venezuela.

*idottus* Dyar, 1920a: 77 ( $\delta$ ). Figs. 52,53.

Holotype  $\delta$ : Surinam (NMNH).

Dyar 1928: 332 ( $\delta^*$ ); Townsend 1934: 491 (Brazil); Rozeboom and Komp 1950: 91 ( $\delta^*$ ); Lane 1953: 470 ( $\delta^*$ ); Duret 1953: 70 ( $\delta^*$ ; Argentina); Duret 1954: 113 ( $\delta^*$ ); Floch and Fauran 1954: 3 ( $\delta^*$ ; French Guiana); Foote 1954: 94 (L\*; as *thomasi*); Fauran 1961a: 7 (tax.); Stone 1961: 46 (Trinidad); Cova Garcia, Sutil and Rausseo 1966a: 41 ( $\delta^*$ ); Duret 1969a: 7 (Paraguay); Stone 1969: 6 (Dominica); Fize 1976: 18, 21, 27 (L\*; Martinique); Belkin and Heinemann 1976b: 188 (Guadeloupe); Belkin and Heinemann 1976c: 272, 288 (Grenada, Saint Lucia); Sirivanakarn 1983: 279 ( $\delta^*$ ); Peyton et al. 1983: 72 (Bolivia).

DISTRIBUTION: Argentina, Bolivia, Brazil, Dominica, French Guiana, Grenada, Guadeloupe, Martinique, Paraguay, Saint Lucia, Suriname, Tobago (Appendix I), Trinidad, Venezuela.

*terepaima* Anduze, 1949a: 65 ( $\delta^*$ ). Holotype  $\delta$ : El Valle, Distrito Federal, Venezuela (FSP). Lane 1953: 470 (syn.); Forattini, Rabello and Cotrim 1970: 49 (type info.).

*inadmirabilis* Dyar, 1928: 297 ( $\delta^*$ ). Fig. 53.

Holotype  $\delta$ : Sao Paulo, Brazil (NMNH).

Komp 1935: 4 (tax.); Rozeboom and Komp 1950: 91 ( $\delta^*$ ; tax.); Lane 1953: 477 ( $\delta^*$ ); Fauran and Pajot 1974: 106 (French Guiana).

DISTRIBUTION: Brazil, French Guiana.

*inhibitor* Dyar and Knab, 1906a: 216 (L\*). Figs. 53-55.

Syntypes Le (with associated  $\text{♀}$ ): San Francisco mines, Santo Domingo, [Dominican Republic] (NMNH).

Howard, Dyar and Knab 1913: Fig. 83 ( $\delta^*$ ); Howard, Dyar and Knab 1915: 425 ( $\delta$   $\text{♀}$ ); Dyar 1928: 317 (in part  $\delta^*$   $\text{♀}$ ; misidentification of L\*, see *erraticus*); Matheson 1929: 173 ( $\delta^*$   $\text{♀}$  L); Aguilar 1931: 10 (El Salvador); Martini 1935: 61 (Guatemala); Komp 1936a: 64 (Colombia); King and Bradley 1937: 349 ( $\delta^*$  L; tax.); Kumm, Komp and Ruiz 1940: 404 (Costa Rica); Anduze 1941: 16 (Venezuela); Hill and Hill 1948: 55 (Jamaica); Rozeboom and Komp 1950: 91 ( $\delta^*$ ); Lane 1953: 466 ( $\delta^*$   $\text{♀}$  P\* L); Fox 1953: 179 (Puerto Rico); Foote 1954:

59 (L\*); Stone and Knight 1957: 51 (type info.); Cova Garcia, Sutil and Rausseo 1966a: 191 ( $\delta^*$ ); Cova Garcia, Sutil and Rausseo 1966b: 213 (L\*); Belkin, Heinemann, and Page 1970: 88 ( $\delta^*$  ♀ P\* L\*); Belkin and Heinemann 1973: 218 (corrected type loc.); Fauran and Pajot 1974: 106 (French Guiana); Panday 1975a: 144 (Suriname); Sirivanakarn 1983: 280 ( $\delta^*$  ♀\*).

DISTRIBUTION: Colombia, Costa Rica, Dominican Republic, El Salvador, French Guiana, Guatemala, Jamaica, Mexico, Panama, Puerto Rico, Suriname, Venezuela.

*investigator* Dyar and Knab, 1906a: 216 (L\*). Syntypes L: Santa Lucrecia [Veracruz], Mexico (NE). Dyar 1928: 317 (syn.); Stone and Knight 1957: 51 (type info.).

*innovator* Evans, 1924: 373 ( $\delta^*$ ). Fig. 55.

Lectotype  $\delta$ : Itacoatiara, Amazonas, Brazil (NHM).

Dyar 1928: 292 ( $\delta^*$ ); Senevet and Abonnenc 1939: 118 ( $\delta^*$ ; French Guiana); Rozeboom and Komp 1950: 92 ( $\delta^*$ ); Foote 1954: 111 (L\*; tax.); Belkin 1968: 16 (tax., lectotype desig.); Belkin, Schick and Heinemann 1971: 25 (type loc. info.).

DISTRIBUTION: Brazil, French Guiana.

*intonsus* Galindo and Blanton, 1954: 231 ( $\delta^*$ ). Fig. 55.

Holotype  $\delta$ : Lancetilla Valley, Tela, Honduras (NMNH).

DISTRIBUTION: Honduras.

*intrincatus* Brethes, 1916: 214 ( $\delta^*$ ). Figs. 56,57; Note 6.

Holotype  $\delta$ : San Isidro, [8 miles north of Buenos Aires], Argentina (BA).

Dyar 1928: 315 ( $\delta^*$ ); Rozeboom and Komp 1950: 92 ( $\delta^*$ ; tax., Suriname); Lane 1953: 488 ( $\delta^*$ ); Foote 1954: 60 (L\*; tax.); Prosen, Martinez and Carcavallo 1963(?): 112 (Bolivia); Cova Garcia, Sutil and Rausseo 1966a: 207 ( $\delta^*$ ; Venezuela); Cova Garcia, Sutil and Rausseo 1966b: 192 (L\*); Fauran and Pajot 1974: 106 (French Guiana); Sirivanakarn 1983: 279 ( $\delta^*$ ); Harbach, Peyton and Harrison 1984: 198 ( $\delta^*$ ; tax.).

DISTRIBUTION: Argentina, Bolivia, Brazil, French Guiana, Suriname, Venezuela.

*cenus* Root, 1927b: 590 (♂\*). Lectotype ♂: Mage, Rio de Janeiro, Brazil (NMNH). Dyar 1928: 315 (syn.); Stone and Knight 1957: 45 (lectotype desig.).

*xivylis* Dyar, 1920a: 78 (♂ L). Holotype ♂: Surinam (NMNH). Komp 1935: 7 (as *xivilis*, *lapsus* for *xivylis*; syn. with *bastagarius*); Rozeboom and Komp 1950: 92 (syn. with *intrincatus*, corrected spelling, tax.); Stone and Knight 1957: 58 (type info.).

*invocator* Pazos, 1908: 426 (A). Fig. 57.

Lectotype ♂: San Antonio de los Banos, [Havana], Cuba, (NMNH).

Dyar and Knab 1909c: 258 (*invocator*; as new species); Howard, Dyar and Knab 1913: Fig. 81 (♂\*); Howard, Dyar and Knab 1915: 323 (♂ ♀; corrected authorship); Dyar 1928: 317 (syn. with *inhibitor*); King and Bradley 1937: 345 (syn. with *erraticus*); Stone and Knight 1957: 52 (lectotype desig.); Sirivanakarn 1978a: 239 (♂\* ♀; resurrected from syn.).

DISTRIBUTION: Cuba.

*iolambdis* Dyar, 1918a: 106 (♂). Figs. 58,59.

Holotype ♂: Panama (NMNH).

Dyar 1928: 328 (♂\* ♀); Rozeboom and Komp 1950: 92 (♂\*, as *iolanbdis*, *lapsus* for *iolambdis*); Pratt and Seabrook 1952: 27 (♂\* ♀ P\* L\*); United States, Puerto Rico); Martinez Palacios 1952: 84 (Mexico); Lane 1953: 471 (♂\* ♀ P\* L\*; Colombia); Foote 1954: 61 (P\* L\*; tax.); Carpenter and LaCasse 1955: 307 (♂\* ♀\* L\*); King et al. 1960: 111 (A L); Cova Garcia, Sutil and Rausseo 1966a: 215 (♂\*; Venezuela); Cova Garcia, Sutil, and Rausseo 1966b: 199 (L\*); Belkin, Heinemann, and Page 1970: 86 (♂\* ♀ P\* L\*; Guatemala, Jamaica); Knight and Haeger 1971: 553 (♀\*; tax.); Belkin and Heinemann 1975: 377 (Cayman Islands); Mattingly 1976: 227 (E\*); Garcia Avila 1976: 9 (Cuba); Heinemann and Belkin 1977a: 284 (Costa Rica); Heinemann and Belkin 1977b: 453 (Nicaragua).

DISTRIBUTION: Cayman Islands, Colombia, Costa Rica, Cuba, El Salvador (Appendix I), Guatemala, Jamaica, Mexico, Nicaragua, Panama, Puerto Rico, United States, Venezuela.

*isabellae* Duret, 1968c: 72 ( $\delta^*$ ). Fig. 59.

Holotype  $\delta$ : Caracarai, Roraima, Brazil (NMNH).

Harbach, Gaffigan and Pecor 1991: 194 (type info.).

DISTRIBUTION: Brazil.

*jocasta* Komp and Rozeboom, 1951: 128 ( $\delta^*$ ). Fig. 59.

Holotype  $\delta$ : Grenville, Grenada (NMNH).

Belkin and Heinemann 1976c: 296 (Saint Vincent).

DISTRIBUTION: Grenada, Saint Vincent.

*johnnyi* Duret, 1968d: 17 ( $\delta^*$ ). Fig. 60.

Holotype  $\delta$ : Rio Preto, Joao Goulard, Amazonas, Brazil (NMNH).

Harbach, Gaffigan and Pecor 1991: 194 (type info.).

DISTRIBUTION: Brazil.

*johnsoni* Galindo and Mendez, 1961: 1 ( $\delta^*$ ). Fig. 60.

Holotype  $\delta$ : Pacora, Panama (NMNH).

DISTRIBUTION: Colombia (Appendix I), Panama.

*jubifer* Komp and Brown, 1935: 254 ( $\delta^*$ ). Figs. 60,61.

Holotype  $\delta$ : Mojinga Swamp, lower Chagres River, Canal Zone, Panama (NMNH).

Rozeboom and Komp 1950: 92 ( $\delta^*$ ); Lane 1953: 435 ( $\delta^*$ ); Cova Garcia, Sutil and Rausseo 1966a: 179 ( $\delta^*$ ; Venezuela); Cova Garcia, Sutil and Rausseo 1966b: 203 (L\*); Fauran and Pajot 1974: 106 (French Guiana); Forattini, Rabello and Cotrim 1970: 43 (Brazil); Sirivanakarn 1983: 279 ( $\delta^*$   $\varphi^*$ ).

DISTRIBUTION: Brazil, French Guiana, Panama, Venezuela.



**keenani** Galindo and Mendez, 1961: 2 ( $\delta^*$ ). Fig. 61.

Holotype  $\delta$ : Pacora, Panama (NMNH).

DISTRIBUTION: Panama.

**kummi** Komp and Rozeboom, 1951: 130 ( $\delta^*$ ). Fig. 61.

Holotype  $\delta$  (genitalia only): Chino Swamp, Almirante, Bocas del Toro, Panama (NMNH).

Foote 1954: 63 (L\*); Barreto-Reyes and Lee 1969: 430 (Colombia).

DISTRIBUTION: Colombia, Nicaragua (Appendix I), Panama.

**lacertosus** Komp and Rozeboom, 1951: 123 ( $\delta^*$ ). Fig. 62.

Holotype  $\delta$  (genitalia only): Almirante, Bocas del Toro, Panama (NMNH).

Clastrier 1972: 169 ( $\delta^*$  ♀ P\* L\*; French Guiana).

DISTRIBUTION: French Guiana, Panama.

**limacifer** Komp, 1936b: 325 ( $\delta^*$ ). Figs. 62,63.

Holotype  $\delta$  (genitalia only): Chase, just across the Panama boundary, in Bocas del Toro, Costa Rica (NMNH).

Rozeboom and Komp 1950: 92 ( $\delta^*$ ); Martinez Palacios 1952: 85 (Mexico); Lane 1953: 440 ( $\delta^*$ ).

DISTRIBUTION: Costa Rica, El Salvador (Appendix I), Mexico, Panama.

**lopesi** Sirivanakarn and Jakob, 1979: 139 ( $\delta^*$ ). Figs. 63,64.

Holotype  $\delta$ : Porto do Ribeira, Iguape, Sao Paulo, Brazil (NMNH).

Sirivanakarn 1983: 279 ( $\delta^*$ ); Forattini and Sallum 1990: 57 ( $\delta^*$  ♀ P\* L\*).

DISTRIBUTION: Brazil.

**lucifugus** Komp, 1936b: 331 ( $\delta^*$ ). Figs. 64,65.

Holotype  $\delta$  (genitalia only): Quiriquire (near Maturin), [Monagas] Venezuela (NMNH).

Rozeboom and Komp 1950: 92 ( $\delta^*$ ; Trinidad); Lane 1953: 467 ( $\delta^*$ ); Foote 1954: 66 (P\* L\*; Colombia); Cova Garcia, Sutil, and Rausseo 1966a: 195 ( $\delta^*$ ); Garcia and Casal 1968: 108 (Argentina); Heinemann and Belkin 1979: 107 (Ecuador); Heinemann, Aitken and Belkin 1980: 271, 276 (Tobago).

DISTRIBUTION: Argentina, Colombia, Ecuador, Tobago, Trinidad, Venezuela.

**madininensis** Senevet, 1936: 129 ( $\delta^*$ ). Fig. 65; Note 5.

Holotype  $\delta$ : Trinite, Martinique Island (FMP).

Rozeboom and Komp 1950: 92 ( $\delta^*$ ); Lane 1953: 441 ( $\delta^*$ ); Belkin 1968: 17 (type info.); Belkin and Heinemann 1975: 389 (Dominica, Leeward Islands - Montserrat, Nevis, Saint Kitts); Belkin and Heinemann 1976b: 188 (Guadeloupe); Belkin and Heinemann 1976c: 289 (Saint Lucia).

DISTRIBUTION: Dominica, Guadeloupe, Martinique, Montserrat, Nevis, Saint Kitts, Saint Lucia.

**martinezi** Casal and Garcia, 1968a: 455 ( $\delta^*$  P\* L\*). Fig. 66.

Holotype  $\delta$ : Vespucio-San Pedrito Road, km 34, Salta, Argentina (INM).

DISTRIBUTION: Argentina.

**maxinocca** Dyar, 1920a: 71 ( $\delta$  L). Fig. 66.

Lectotype  $\delta$ : Surinam (NMNH).

Dyar 1928: 323 ( $\delta^*$  L\*); Rozeboom and Komp 1950: 92 ( $\delta^*$ ; lectotype desig.); Lane 1953: 478 ( $\delta^*$  P\* L\*); Foote 1954: 68 (L\*); Stone and Knight 1957: 53 (type info.); Fauran 1961b: 38 (French Guiana).

DISTRIBUTION: French Guiana, Suriname.

**tosimus** Dyar, 1920a: 72 ( $\delta$  L). Holotype  $\delta$ : Surinam (NMNH). Dyar 1928: 323 (syn.); Stone and Knight 1957: 53 (type info.).

**mesodenticulatus** Galindo and Mendez, 1961: 2 ( $\delta^*$ ). Fig. 66.

Holotype  $\delta$ : Almirante, Bocas del Toro, Panama (NMNH).

DISTRIBUTION: Panama.

**milwardi** Xavier and da Silva Mattos, 1972: 569 ( $\delta^*$ ). Fig. 67.

Holotype  $\delta$ : Bairro Ressaca, Belo Horizonte, Minas Gerais, Brazil (FSP).

Forattini, Sallum and Kakitani 1988: 535 (type info.).

DISTRIBUTION: Brazil.

**misionensis** Duret, 1953: 75 ( $\delta^*$ ). Fig. 67; Note 3.

Holotype  $\delta$ : Aristobulo del Valle, Misiones, Argentina (NMNH).

Duret 1954: 115 ( $\delta^*$ ; type info.); Duret and Barreto 1956: 86 (Brazil); Harbach, Gaffigan and Pecor 1991: 194 (type info.).

DISTRIBUTION: Argentina, Brazil.

**mistura** Komp and Rozeboom, 1951: 124 ( $\delta^*$   $\varnothing$   $L^*$ ). Figs. 67,68.

Holotype  $\delta$ : Laguna de la Palmita, Villavicencio, Meta, Colombia (NMNH).

Footé 1954: 69 ( $P^*$   $L^*$ ); Galindo and Blanton 1955: 71 (Panama); Fauran 1957 (in Floch 1957: 165) (French Guiana); Cova Garcia, Sutil and Rausseo 1966a: 199 ( $\delta^*$ ); Cova Garcia, Sutil and Rausseo 1966b: 205 ( $L^*$ ); Sirivanakarn 1983: 279 ( $\delta^*$ ).

DISTRIBUTION: Brazil, Colombia, French Guiana, Panama, Venezuela.

**mulrennani** Basham, 1948: 1 ( $\delta^*$   $\varnothing$   $P^*$   $L^*$ ). Figs. 68,69.

Holotype  $\delta$ : Big Pine Key, Monroe, Florida, United States (NMNH).

Rozeboom and Komp 1950: 93 ( $\delta^*$ ); Yamaguti and LaCasse 1951: 91 ( $\delta^*$   $L^*$ ); Yamaguti 1952: 29 ( $\delta^*$ ); Footé 1954: 71 ( $P^*$   $L^*$ ); Carpenter and LaCasse 1955: 308 ( $\delta^*$   $\varnothing$   $L^*$ ); Stone, Knight and Starcke 1959: 273 (Cuba); King et al. 1960: 117 (A L); Knight and Haeger 1971: 554 ( $\varnothing^*$ ; tax.); Belkin and

Heinemann 1975: 372, 377 (Bahamas, Cayman Islands); Sirivanakarn 1983: 280 ( $\delta^*$ ).

DISTRIBUTION: Bahamas, Cayman Islands, Cuba, United States.

*mutator* Dyar and Knab, 1906a: 216 (L\*). Fig. 69.

Lectotype Le (with associated Pe  $\delta$ ): Cordoba, [Veracruz], Mexico (NMNH).

Howard, Dyar and Knab 1913: Figs. 68, 361, 595 ( $\delta^*$ , L\*); Howard, Dyar and Knab 1915: 427 ( $\delta$  ♀ L); Dyar 1928: 316 ( $\delta^*$  ♀ L\*; Costa Rica); Aguilar 1931: 10 (El Salvador); Komp 1935: 6 (tax.); Rozeboom and Komp 1950: 93 ( $\delta^*$ ; lectotype desig.); Lane 1953: 461 ( $\delta^*$  L\*); Foote 1954: 73 (P\* L\*); Galindo and Blanton 1955: 71 (Panama); Stone and Knight 1957: 53 (type info., clarification of lectotype).

DISTRIBUTION: Costa Rica, El Salvador, Mexico, Panama.

*nicaroensis* Duret, 1967: 77 ( $\delta^*$  ♀). Figs. 69,70.

Holotype  $\delta$ : Nicaro, Mayari, Oriente, Cuba (NMNH).

Sirivanakarn 1983: 279 ( $\delta^*$ ); Harbach, Gaffigan and Pecor 1991: 194 (type info.).

DISTRIBUTION: Cuba.

*nicceriensis* Bonne-Wepster and Bonne, 1920: 174 ( $\delta$  ♀ L). Fig. 70.

Lectotype  $\delta$ : Kabelstation, Surinam (ITH).

Bonne and Bonne-Wepster 1925: 288 ( $\delta^*$  ♀ L\*); Dyar 1928: 303 ( $\delta^*$  ♀ L\*); Rozeboom and Komp 1950: 93 ( $\delta^*$ ); Foote 1954: 74 (L\*; Venezuela); Belkin 1968: 18 (lectotype desig.); Cova Garcia, Sutil and Rausseo 1966a: 209 ( $\delta^*$ ); Cova Garcia, Sutil, and Rausseo 1966b: 195 (L\*).

DISTRIBUTION: Suriname, Venezuela.

*ocossa* Dyar and Knab, 1919: 6 ( $\delta$ ). Figs. 70-71.

Lectotype  $\delta$ : British Guiana [Georgetown, Guyana] (NMNH).

Dyar 1923b: 120 (syn. with *aikenii*); Dyar 1928: 337 (in part, see *panocossa*; Colombia, Panama, Suriname, Venezuela; as *aikenii*); Stone and Knight 1957:

54 (lectotype desig.); Belkin 1970: 59 (resurrected from syn.); Belkin, Heinemann and Page 1970: 93 ( $\delta^*$  P\* L\*); Heinemann and Belkin 1979: 80 (Brazil); Sirivanakarn and Jacob 1982b: 195 (Argentina); Sirivanakarn 1983: 279 ( $\delta^*$   $\varphi^*$ ).

DISTRIBUTION: Argentina, Brazil, Colombia, Ecuador, Guyana, Panama, Suriname, Venezuela.

*oedipus* Root, 1927b: 588 ( $\delta^*$ ). Figs. 71,72.

Lectotype  $\delta$ : Mage, Rio de Janeiro, Brazil (NMNH).

Dyar 1928: 309 ( $\delta^*$ ; syn. with *phlogistus*); Rozeboom and Komp 1950: 94 ( $\delta^*$ ; resurrected from syn., lectotype desig.); Lane 1953: 446 ( $\delta^*$ ); Duret 1953: 70 ( $\delta^*$ ; Argentina); Duret 1954: 117 ( $\delta^*$ ); Galindo and Blanton 1955: 71 (Panama); Stone and Knight 1957: 54 (type info.); Garcia and Casal 1965: 9 (P\*); Forattini and Sallum 1987a: 123 ( $\delta^*$   $\varphi^*$  P\* L\*).

DISTRIBUTION: Argentina, Brazil, Ecuador (Appendix I), Panama.

*olimpioi* Xavier, da Silva and da Silva Mattos, 1970: 183 ( $\delta^*$ ). Fig. 72.

Holotype  $\delta$ : Rio Branco, Acre, Brazil (CPRR).

DISTRIBUTION: Brazil.

*orfilai* Duret, 1953: 74 ( $\delta^*$ ). Fig. 72; Note 3.

Holotype  $\delta$ : Iguazu, (Villa Tacuara), Misiones, Argentina (NMNH).

Duret 1954: 117 ( $\delta^*$ ; type info.); Harbach, Gaffigan and Pecor 1991: 194 (type info.).

DISTRIBUTION: Argentina.

*palaciosi* Duret, 1968d: 15 ( $\delta^*$ ). Fig. 73.

Holotype  $\delta$ : Boa Vista, Roraima, Brazil (NMNH).

Fauran and Pajot 1974: 108 (French Guiana); Harbach, Gaffigan and Pecor 1991: 194 (type info.).

DISTRIBUTION: Brazil, French Guiana.

**panocossa** Dyar, 1923b: 120 ( $\delta$ ). Figs. 73,74.

Lectotype  $\delta$ : Bas Obispo, Canal Zone, Panama (NMNH).

Dyar 1923d: 188 ( $\delta^*$ ; as *aikenii*); Dyar 1925a: 21 (syn. with *aikenii*); Bonne and Bonne-Wepster 1925: 275, 277 ( $\delta^*$  ♀ L; as *aikenii*); Dyar 1928: 337 (in part,  $\delta^*$ ; as *aikenii*); Anduze 1941: 15 (Venezuela; as *aikenii*); Thompson 1947: 79 (Jamaica; as *aikenii*); Rozeboom and Komp 1950: 99 ( $\delta^*$ ; as *aikenii*); Lane 1953: 423 ( $\delta^*$  ♀ P L\*; as *aikenii*); Foote 1954: 14 (L\* P\*; as *aikenii*); Barreto-Reyes 1955: 60 (Colombia; as *aikenii*); Stone and Knight 1957: 54 (lectotype desig.); Cova Garcia, Sutil and Rausseo 1966a: 175 ( $\delta^*$ ; as *aikenii*); Cova Garcia, Sutil and Rausseo 1966b: 213 (L\*; as *aikenii*); Belkin 1970: 60 (resurrected from syn.; Costa Rica, Mexico); Belkin, Heinemann and Page 1970: 93 ( $\delta^*$ ); Bertram 1971: 745 (Belize); Clark-Gil and Darsie 1983: 255 (Guatemala).

DISTRIBUTION: Belize, Colombia, Costa Rica, El Salvador (Appendix I), Guatemala, Jamaica, Mexico, Panama, Venezuela.

**paracrybda** Komp, 1936b: 330 ( $\delta^*$ ). Fig. 75.

Holotype  $\delta$ : Juan Diaz, Panama (NMNH).

Rozeboom and Komp 1950: 94 ( $\delta^*$ ); Galindo 1969: 87 (tax.); Duret 1969a: 10 ( $\delta^*$ ); Panday 1975b: 298 (Suriname); Sirivanakarn 1983: 279 ( $\delta^*$ ); Clark-Gil and Darsie 1983: 255 (Guatemala).

DISTRIBUTION: Guatemala, Panama, Suriname.

**patientiae** Floch and Fauran, 1955: 1 ( $\delta^*$ ). Fig. 76.

Holotype  $\delta$  (genitalia only): Patience (Haute-Mana), French Guiana (PIG).

DISTRIBUTION: French Guiana.

**pavlovskiy** Casal and Garcia, 1967: 20 ( $\delta^*$ ). Fig. 76.

Holotype  $\delta$ : Aeropuerto de Camba Punta, Corrientes, Argentina (INM).

Belkin, Schick and Heinemann 1968: 16 (type info.).

DISTRIBUTION: Argentina.

*peccator* Dyar and Knab, 1909c: 256 (A). Figs. 76-78.

Lectotype ♂: Scott, Pulaski, Arkansas, United States (NMNH).

Howard, Dyar and Knab 1913: Fig. 67 (♂\*); Howard, Dyar and Knab 1915: 318 (♂ ♀); Dyar and Barret 1918: 119 (L); Dyar 1928: 300 (in part ♂\* ♀; misidentification of L, see *erraticus*); King and Bradley 1937: 350 (L\*); Rozeboom 1942: 41 (♂\* ♀ L); Roth 1943: 123 (♂\*); Roth and Young 1944: 87 (♂\*); Matheson 1944: 217 (♂\* ♀ L); Wirth 1945: 203 (♂\*); Carpenter, Middlekauff and Chamberlain 1946: 265 (♂\* ♀ L\*); Rozeboom and Komp 1950: 94 (♂\*; lectotype desig.); Yamaguti and LaCasse 1951: 98 (♂\* ♀\* L\*); Yamaguti 1952: 29 (♂\* ♀\*); Foote 1954: 79 (L\*; Puerto Rico); Carpenter and LaCasse 1955: 312 (♂\* ♀\* L\*); Vargas 1956: 29 (Mexico); Stone and Knight 1957: 54 (type info.); King et al. 1960: 114 (A L); Ross and Horsfall 1965: 24, 40 (♂\* L\*); Belkin, Schick and Heinemann 1966: 22 (type loc. info.); Montchadsky and Garcia Avila 1976: 46 (Cuba); Knight and Haeger 1971: 554 (♀\*; tax.); Mattingly 1976: 227 (E\*); Sirivanakarn 1983: 280 (♀\*).

DISTRIBUTION: Cuba, Mexico, Puerto Rico, United States.

*incriminator* Dyar and Knab, 1909c: 257 (A). Lectotype ♂: Agricultural College, Mississippi, United States (NMNH). Howard, Dyar and Knab 1913: Fig. 71 (♂\*); Howard, Dyar and Knab 1915: 409 (♂ ♀); Dyar and Knab 1918: 179 (syn.); Stone and Knight 1957: 51 (lectotype desig.).

*pedroi* Sirivanakarn and Belkin, 1980: 12 (♂\* ♀\* P\* L\*). Figs. 78,79; Note 2.

Holotype ♂: Juan Mina (0.5 km S of Rio Chagres), Canal Zone, Panama (NMNH).

Bonne and Bonne-Wepster 1925: 296 (♂\*; as *taeniopus*); Dyar 1928: 293 (♂\*; as *taeniopus*); Cerqueira 1943: 34 (Bolivia; as *taeniopus*); Rozeboom and Komp 1950: 89, 96 (♂\* P L; as *taeniopus*); Duret 1953: 70 (♂\*; as *taeniopus*); Duret 1954: 102 (♂\*; as *taeniopus*); Forattini 1965: 184 (♂\*; as *taeniopus*); Cova Garcia, Sutil and Rausseo 1966a: 36 (♂\*; as *taeniopus*); Sirivanakarn 1983: 279 (♂\*); Clark-Gil and Darsic 1983: 256 (Guatemala).

DISTRIBUTION: Argentina, Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Guatemala, Guyana, Mexico, Panama, Suriname, Tobago, Trinidad, Venezuela.

*penai* Sirivanakarn, 1979: 135 ( $\delta^*$ ). Fig. 80.

Holotype  $\delta$ : Chapare, San Antonio, Bolivia (NMNH).

Sirivanakarn 1983: 280 ( $\delta^*$ ).

DISTRIBUTION: Bolivia, Ecuador.

*pereyrai* Duret, 1967: 81 ( $\delta^*$ ). Figs. 80, 81.

Holotype  $\delta$ : Cecilio Baez, Caaguazu, Paraguay (NMNH).

Galindo 1969: 88 (tax.); Forattini and Sallum 1989b: 478 ( $\delta^*$ ,  $\varphi^*$ ; Brazil); Harbach, Gaffigan and Pecor 1991: 194 (type info.).

DISTRIBUTION: Brazil, Paraguay.

*phlabistus* Dyar, 1920a: 63 ( $\delta$ ). Figs. 81, 82.

Holotype  $\delta$ : Surinam (NMNH).

Dyar 1928: 313 ( $\delta^*$ ); Rozeboom and Komp 1950: 94 ( $\delta^*$ ); Fauran and Pajot 1974: 106 (French Guiana); Sirivanakarn 1983: 279 ( $\delta^*$ ).

DISTRIBUTION: Brazil, French Guiana, Suriname.

*kerri* Duret, 1968a: 11 ( $\delta^*$ ). Holotype  $\delta$ : Rio Preto, Joao Goulard, Amazonas, Brazil (NMNH). Sirivanakarn 1983: 274 (syn.); Harbach, Gaffigan and Pecor 1991: 194 (type info.).

*phlogistus* Dyar, 1920a: 61 ( $\delta$  L). Figs. 82, 83.

Holotype  $\delta$ : Surinam (NMNH).

Dyar 1928: 309 (in part L\*; misidentification of  $\delta^*$ , see *oedipus*); Komp 1935: 5 (Panama); Rozeboom and Komp 1950: 94 ( $\delta^*$ ; tax.); Lane 1953: 444 ( $\delta^*$   $\varphi$  P\* L\*; Brazil, Venezuela); Foote 1954: 81 (P\* L\*; Colombia); Floch and Fauran 1954: 6 ( $\delta^*$ ; French Guiana); Fauran 1961a: 4 (tax.); Cova Garcia, Sutil and Rausseo 1966a: 189 ( $\delta^*$ ); Cova Garcia, Sutil and Rausseo 1966b: 193 (L\*); Forattini and Sallum 1987a: 149 ( $\delta^*$ ).

DISTRIBUTION: Brazil, Colombia, French Guiana, Panama, Suriname, Venezuela.



*pifanoi* Anduzc, 1949a: 60 (♂\*). Fig. 84.

Holotype ♂: Caripito, Monagas, Venezuela (FSP).

Cova Garcia, Sutil and Rausseo 1966a: 221 (♂\*); Forattini, Rabello and Cotrim 1970: 45 (type info.); Sirivanakarn 1983: 279 (♂\*).

DISTRIBUTION: Venezuela.

*pilosus* (Dyar and Knab, 1906a: 224) (L\*; *Mochlostyrax*). Figs. 84-89; Notes 5,12.

Lectotype Le (with associated Pe ♂): Santa Lucrecia, [Veracruz], Mexico (NMNH).

Howard, Dyar and Knab 1913: Figs. 80, 379 (♂\* L\*); Howard, Dyar and Knab 1915: 393 (♂ ♀ L); Dyar 1924b: 186 (Colombia); Dyar 1925b: 29 (Ecuador); Dyar 1925c: 170 (Panama); Dyar 1928: 290 (♂\* ♀ L\*; Venezuela); Matheson 1929: 171 (♂\* ♀ L); Aguilar 1931: 10 (El Salvador); Martini 1935: 61 (Belize); King and Bradley 1937: 353 (tax.); Tulloch 1937: 147 (Puerto Rico); Kumm, Komp and Ruiz 1940: 404 (Costa Rica); Roth 1943: 123 (♂\*); Roth and Young 1944: 86 (♂\*); Matheson 1944: 218 (♂\* ♀ L); Michener 1944: 263 (♀\*); Wirth 1945: 205 (♂\*); Carpenter, Middlekauff and Chamberlain 1946: 268 (♂\* ♀ L\*); Rozeboom and Komp 1950: 94 (♂\*); Yamaguti and LaCasse 1951: 102 (♂\* ♀\* L\*); Yamaguti 1952: 29 (♂\* ♀\*); Duret 1953: 70 (♂\*; Argentina); Lane 1953: 452 (♂\* ♀ P\* L\*; Brazil); Duret 1954: 99 (♂\*); Foote 1954: 114 (P\* L\*; tax., Honduras, Bahamas, Nicaragua); Carpenter and LaCasse 1955: 313 (♂\* ♀\* L\*); Stone and Knight 1957: 54 (lectotype desig.); King et al. 1960: 115 (A L); Stone 1961: 47 (Trinidad); Cova Garcia, Sutil and Rausseo 1966a: 169 (♂\*); Duret 1969a: 3 (Paraguay); Belkin, Heinemann and Page 1970: 90 (♂\* ♀ P\* L\*); Knight and Haeger 1971: 554 (♀\*; tax.); Belkin and Heinemann 1972: 66 (Dominican Republic); Mattingly 1976: 223 (E\*); Heinemann and Belkin 1977b: 428 (Guatemala); Sirivanakarn 1983: 280 (♂\* ♀\*); Peyton et al. 1983: 73 (Bolivia).

DISTRIBUTION: Argentina, Bahamas, Belize, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, French Guiana, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Puerto Rico, Suriname, Trinidad, United States, Venezuela.

*cubensis* (Dyar and Knab, 1906a: 225) (L\*; *Mochlostyrax*). Syntypes L: Havana, Cuba (NE). Dyar and Knab 1907b: 100 (preoccupied name, see *agitator* Dyar and Knab); Stone and Knight 1957: 46 (type info.).

*floridanus* (Dyar and Knab, 1906b: 171) (L; *Mochlostyrax*). Syntypes L: Estero, Florida, United States (NE). Howard, Dyar and Knab 1915: 402 (♀ L\*); Dyar 1924b: 186 (syn.); Stone and Knight 1957: 50 (type info.).

*jamaicensis* (Grabham, 1906: 318) (♂ ♀ L\*; *Mochlostyrax*). Lectotype ♂: Kingston, [Surrey], Jamaica (NMNH). Dyar and Knab 1909c: 257 (preoccupied name, see *reductor* Dyar and Knab); Dyar 1924b: 186 (syn.); Belkin, Heinemann and Page 1970: 90 (lectotype desig.).

*agitator* Dyar and Knab, 1907b: 100 (*nom. nov.* for *cubensis* Dyar and Knab, *non* Bigot, 1857). Howard, Dyar and Knab 1913: Figs. 61, 381, 589 (♂\* L\*); Howard, Dyar and Knab 1915: 384 (♂ ♀ L); Dyar and Knab 1918: 180 (syn. with *floridanus*).

*hesitator* Dyar and Knab, 1907c: 205 (♂ ♀). Lectotype ♂: Las Cascadas, Canal Zone, Panama (NMNH). Howard, Dyar and Knab 1913: Figs. 80, 379 (♂\* L\*); Howard, Dyar and Knab 1915: 319 (♂ ♀); Dyar 1928: 289 (♂\* ♀); Rozeboom and Komp 1950: 91 (♂\*); Lane 1951: 334 (syn.); Stone and Knight 1957: 50 (lectotype desig.).

*ignobilis* Dyar and Knab, 1909a: 39 (A). Lectotype ♂: San Antonio de los Banos, [Havana], Cuba (NMNH). Howard, Dyar and Knab 1915: 390 (♀); Dyar 1928: 94 (syn.); Stone and Knight 1957: 51 (lectotype desig.).

*reductor* Dyar and Knab, 1909c: 257 (*nom. nov.* for *jamaicensis* Grabham, *non* Theobald, 1901). Howard, Dyar and Knab 1913: Figs. 77, 382 (♂\* L\*); Howard, Dyar and Knab 1915: 399 (♂ ♀ L); Dyar 1924b: 186 (syn.).

*deceptor* Dyar and Knab, 1909c: 257 (A). Lectotype ♂: Fort White, Florida, United States (NMNH). Howard, Dyar and Knab 1913: Fig. 82 (♂\*); Howard, Dyar and Knab 1915: 408 (♂ ♀); Dyar and Knab 1918: 180 (syn. with *floridanus*); Stone and Knight 1957: 47 (lectotype desig.).

*mastigia* Howard, Dyar and Knab, 1913: Fig. 90 (♂\*). Lectotype ♂: San Antonio de los Banos, [Havana], Cuba (NMNH). Howard, Dyar and Knab 1915: 426 (♂, ♀). Dyar and Knab 1918: 180 (syn. with *floridanus*); Stone and Knight 1957: 53 (lectotype desig.).

*curopinensis* Bonne-Wepster and Bonne, 1920: 177 (♂). Lectotype ♂: Surinam (ITH). Dyar 1924b: 186 (syn.); Belkin 1968: 15 (lectotype desig., type loc. info.).

*colombiensis* Dyar, 1924b: 184 (♂). Holotype ♂: Colombia (NMNH). Dyar

1928: 289 (syn. with *hesitator*).

*radiatus* Senevet and Abonnenc, 1939: 120 (♂\* L\*). Holotype ♂: Cayenne and Saut-Tigre, [Inini], French Guiana (MNHP). Rozeboom and Komp 1950: 94 (syn.); Belkin 1968: 19 (type info.).

*plectoporpe* Root, 1927b: 589 (♂\*). Figs. 89,90.

Lectotype ♂: Bangu, Rio de Janeiro, Brazil (NMNH).

Dyar 1928: 312 (♂\*); Komp 1935: 6 (Panama); Senevet and Abonnenc 1939: 83 (♂\* L\*; French Guiana); Rozeboom and Komp 1950: 95 (♂\*; type loc. info.); Lane 1953: 447 (♂\* L); Foote 1954: 82 (L\*); Stone and Knight 1957: 55 (lectotype desig.); Stone 1961: 47 (syn. with *phlogistus*); Clastrier 1970a: 467 (resurrected from syn.); Sirivanakarn and Jakob 1982b: 197 (Argentina); Forattini and Sallum 1987a: 127 (♂\* ♀\* P\* L\*).

DISTRIBUTION: Argentina, Brazil, French Guiana, Panama.

*portesi* Senevet and Abonnenc, 1941: 41 (♂\*). Figs. 91,92; Note 10.

Holotype ♂: French Guiana (NE).

Rozeboom and Komp 1950: 95 (♂\*; tax.); Lane 1951: 334 (syn. with *vomerifer*); Floch and Kramer 1965: 1 (♂\*; tax.); Aitken and Galindo 1966: 202 (♂\* ♀; resurrected from syn.; Brazil, Trinidad); Belkin 1968: 53 (type info.); Panday 1975a: 144 (Suriname); Mattingly 1976: 224 (E\*); Heinemann and Belkin 1978a: 394 (Venezuela); Sirivanakarn and Degallier 1982: 153 (♂\* ♀ P\* L\*); Sirivanakarn 1983: 278 (♂\*).

DISTRIBUTION: Brazil, French Guiana, Suriname, Trinidad, Venezuela.

*cayennensis* Floch and Abonnenc, 1945b: 4 (♂\*). Holotype ♂: Cayenne, [Guyane], French Guiana (NE). Floch and Abonnenc 1947: 6 (syn.); Floch and Kramer 1965: 3 (♂\*; resurrected from syn.); Belkin 1968: 14 (type info.); Harrison 1973: 277 (type info.); Sirivanakarn and Degallier 1982: 154 (syn.).

*productus* Senevet and Abonnenc, 1939: 107 (♂\* L\*). Fig. 92.

Holotype ♂: Saint-Elie, French Guiana (NE).

Rozeboom and Komp, 1950: 89 (syn. with *comminutor*); Foote 1954: 83 (L\*; resurrected from syn.); Belkin 1968: 53 (type info.); Clastrier 1971: 638 (♂\* ♀

P\* L\*); Heinemann and Belkin 1979: 81 (Brazil).

DISTRIBUTION: Brazil, French Guiana.

*psatharus* Dyar, 1920b: 173 ( $\delta$ ). Figs. 92,93.

Lectotype  $\delta$ : Colon, Canal Zone, Panama (NMNH).

Dyar 1928: 296 ( $\delta^*$   $\varnothing$ ); Rozeboom and Komp 1950: 95 ( $\delta^*$ ; lectotype desig.); Lane 1953: 481 ( $\delta^*$   $\varnothing$  P\* L\*); Foote 1954: 84 (P\* L\*); Heinemann and Belkin 1977a: 284 (Costa Rica); Heinemann and Belkin 1979: 108 (Ecuador); Sirivanakarn 1983: 279 ( $\delta^*$ ).

DISTRIBUTION: Costa Rica, Ecuador, Panama.

*putumayensis* Matheson, 1934: 121 ( $\delta^*$ ). Figs. 93,94; Note 10.

Holotype  $\delta^*$ : Santo Antonio do Ica, Amazonas, Brazil (NMNH).

Levi Castillo 1949: 192 (Ecuador); Rozeboom and Komp 1950: 95 ( $\delta^*$ ); Lane 1953: 431 ( $\delta^*$ ); Stone 1961: 47 (Trinidad); Belkin, Schick and Heinemann 1971: 24 (type loc. info.); Clastrier 1971: 630 ( $\delta^*$   $\varnothing$  P\* L\*); Panday 1975a: 144 (Surinam); Sirivanakarn 1983: 279 ( $\delta^*$ ).

DISTRIBUTION: Brazil, Ecuador, French Guiana, Peru, Suriname, Trinidad.

*cavernicola* Floch and Abonnenc, 1945c: 1 ( $\delta^*$ ; as *cavernicolus*). Holotype  $\delta$ : Cayenne, [Guyane], French Guiana (NE). Rozeboom and Komp 1950: 95 (syn.); Belkin 1968: 14 (type info.); Harrison 1973: 279 (type info.); Knight and Stone 1977: 273 (emend. to *cavernicola*).

*quadrifolius* Komp, 1936b: 322 ( $\delta^*$ ). Figs. 94,95.

Holotype  $\delta$ : Mojinga Swamp, lower Chagres River, Canal Zone, Panama (NMNH).

Rozeboom and Komp 1950: 96 ( $\delta^*$ ); Lane 1953: 489 ( $\delta^*$ ).

DISTRIBUTION: Panama.

*quasihybridus* Galindo and Blanton, 1954: 232 ( $\delta^*$ ). Fig. 95.

Holotype  $\delta$ : Puerto Pilon, Panama (NMNH).

Barreto-Reyes and Lee 1969: 430 (Colombia).

DISTRIBUTION: Colombia, Panama.

**rabanicola** Floch and Abonnenc, 1946a: 1 ( $\delta^*$ ; as *rabanicolus*). Fig. 95.

Holotype  $\delta$ : Raban, French Guiana (PIP).

Rozeboom and Komp 1950: 96 ( $\delta^*$ ; as *rabanicolus*); Lane 1953: 451 ( $\delta^*$ ; as *rabanicolus*); Stone 1967: 217 (emend. to *rabanicola*); Harrison 1973: 278 (type info.); Heinemann and Belkin 1978a: 445 (Guyana); Heinemann, Aitken and Belkin 1980: 214 (Trinidad); Sirivanakarn 1983: 279 ( $\delta^*$ ); Rodhain and Boutonnier 1984: 277 (type info.).

DISTRIBUTION: French Guiana, Guyana, Trinidad.

**rabelloi** Forattini and Sallum, 1987a: 130 ( $\delta^*$   $\text{♀}^*$   $\text{P}^*$   $\text{L}^*$ ). Fig. 96.

Holotype  $\delta$ : Pariquera-Mirim, Pariquera-Acu, Sao Paulo, Brazil (FSP).

Duret 1953: 70 ( $\delta^*$ ; as *albinensis*); Duret 1954: 104 ( $\delta^*$ ; as *albinensis*); Forattini, Sallum and Kakitani 1988: 537 (type info.).

DISTRIBUTION: Argentina, Brazil.

**rachoui** Duret, 1968b: 58 ( $\delta^*$ ). Fig. 96.

Holotype  $\delta$ : Paragominas, Capin, Para, Brazil (NMNH).

Harbach, Gaffigan and Pecor 1991: 194 (type info.).

DISTRIBUTION: Brazil.

**ribeirensis** Forattini and Sallum, 1985: 171 ( $\delta^*$   $\text{♀}^*$   $\text{P}^*$   $\text{L}^*$ ). Fig. 97; Note 2.

Holotype  $\text{♀}$ : Ribeira Valley, Pariquera-Acu, Sao Paulo, Brazil (FSP).

Forattini, Sallum and Kakitani 1988: 537 (type info.); Sirivanakarn and Jakob 1979: 139 (as *epanastasis*).

DISTRIBUTION: Brazil.

*ronderosi* de Linero, 1967: 289 ( $\delta^*$  ♀). Fig. 97.

Holotype  $\delta$ : Oricopiche, Ciudad Bolivar, Bolivar, Venezuela (EUO).

DISTRIBUTION: Venezuela.

*rooti* Rozeboom, 1935: 251 ( $\delta^*$ ). Fig. 98.

Lectotype  $\delta$ : Panama City, Panama (NMNH).

Rozeboom 1936: 266 ( $\delta$  L\*); Rozeboom and Komp 1950: 96 ( $\delta^*$ ); Martinez Palacios 1952: 85 (Mexico); Duret 1953: 70 ( $\delta^*$ ; Argentina); Duret 1954: 102 ( $\delta^*$ ); Foote 1954: 116 (P\* L\*; Colombia); Stone and Knight 1957: 55 (lectotype desig.); Sutil Oramas 1980: 15 (Venezuela).

DISTRIBUTION: Argentina, Colombia, Mexico, Panama, Venezuela.

*rorotaensis* Floch and Abonnenc, 1946a: 3 ( $\delta^*$ ). Figs. 98,99.

Holotype  $\delta$ : Rorota, [Guyane], French Guiana (PIG).

Rozeboom and Komp 1950: 96 ( $\delta^*$ ). Lane 1953: 485 ( $\delta^*$ ). Belkin 1968: 47 (type info.); Forattini, Sallum and Kakitani 1988: 537 (Brazil).

DISTRIBUTION: Brazil, French Guiana, Suriname (Appendix I).

*sacchettae* Sirivanakarn and Jakob, 1982a: 192 ( $\delta^*$  ♀). Figs. 99,100.

Holotype  $\delta$ : Cananea (Brucouha), Sao Paulo, Brazil (FSP).

Forattini, Sallum and Kakitani 1988: 537 (type info.); Forattini and Sallum 1989d: 117 ( $\delta^*$  ♀\* P\* L\*).

DISTRIBUTION: Brazil.

*saramaccensis* Bonne-Wepster and Bonne, 1920: 172 ( $\delta$  ♀ L). Figs. 100,101.

Lectotype  $\delta$ : Kabelstation, Surinam River, Surinam (ITH).

Bonne and Bonne-Wepster 1925: 305 ( $\delta^*$  ♀ L); Dyar 1928: 304 ( $\delta^*$  ♀ L\*); Levi Castillo 1949: 192 (Ecuador); Rozeboom and Komp 1950: 96 ( $\delta^*$ ); Lane 1953: 454 ( $\delta$  ♀ L); Foote 1954: 86 (L\*); Belkin 1968: 20 (lectotype desig., type loc. info.); Sirivanakarn 1983: 279 ( $\delta^*$ ).

DISTRIBUTION: Ecuador, French Guiana, Suriname.

*implicatus* Senevet and Abonnenc, 1939: 99 ( $\delta^*$  L\*). Holotype  $\delta$ : Sinnamary, [Guyane], French Guiana (NE). Rozeboom and Komp 1950: 91 ( $\delta^*$ ); Lane 1951: 334 (syn. with *nigrescens*); Foote 1954: 58 (L\*); Belkin 1968: 53 (type info.); Sirivanakarn 1983: 274 (transferred syn.).

*sardinerae* Fox, 1953: 179 ( $\delta^*$   $\varnothing$  P\* L\*). Fig. 102.

Holotype  $\delta$ : Dorado (Finca Sardinera), [Arecibo] Puerto Rico (STMPR).

Sirivanakarn 1983: 279 ( $\delta^*$ ); Clark-Gil and Darsie 1983: 257 (Guatemala).

DISTRIBUTION: Guatemala, Panama, Puerto Rico.

*bilobatus* Galindo and Blanton, 1954: 236 ( $\delta^*$ ). Holotype  $\delta$ : Rio Banana, near Almirante [Bocas del Toro], Panama (NMNH). Galindo and Blanton 1955: 72 (syn.).

*serratimarge* Root, 1927b: 589 ( $\delta^*$ ). Figs. 102,103.

Holotype  $\delta$ : Sant' Anna [de Japin], Rio de Janeiro, Brazil (NMNH).

Dyar 1928: 312 ( $\delta^*$ ; unjustified emend. to *serratamargo*); Komp 1935: 6 (Panama; as *serratamargo*); Senevet and Abonnenc 1939: 85 ( $\delta^*$  L\*; French Guiana, as *serratamargo*); Rozeboom and Komp 1950: 96 ( $\delta^*$ ; original spelling); Lane 1953: 419 ( $\delta^*$  L); Duret 1953: 70 ( $\delta^*$ ; Argentina); Duret 1954: 120 ( $\delta^*$ ); Foote 1954: 87 (P\* L\*; Colombia); Duret 1969a: 8 (Paraguay); Sutil Oramas 1980: 15 (Venezuela); Peyton, Harbach and Roberts 1984: 183 (Bolivia).

DISTRIBUTION: Argentina, Bolivia, Brazil, Colombia, French Guiana, Guatemala (Appendix I), Nicaragua (Appendix I), Panama, Paraguay, Trinidad (Appendix I), Venezuela.

*silvai* Duret, 1968e: 69 ( $\delta^*$ ). Fig. 103.

Holotype  $\delta$ : Caracarai, Roraima, Brazil (NMNH).

Harbach, Gaffigan and Pecor 1991: 194 (type info.).

DISTRIBUTION: Brazil.

**simulator** Dyar and Knab, 1906a: 218 (L\*). Fig. 104.

Lectotype L: Arima, Trinidad (NMNH).

Howard, Dyar and Knab 1913: Figs. 352, 575 (L\*); Howard, Dyar and Knab 1915: 302 (L); Dyar 1928: 333 (L\*); Rozeboom and Komp 1950: 98 (tax.); Foote 1954: 89 (L\*; tax.); Stone and Knight 1957: 56 (lectotype desig.); Sirivanakarn and Heinemann 1980: 41 ( $\delta^*$   $\varphi^*$  P\* L\*; Panama).

DISTRIBUTION: Panama, Trinidad, Venezuela.

*venezuelensis* Anduze, 1949a: 64 ( $\delta^*$ ). Holotype  $\delta$ : Caripito, Monagas, Venezuela (FSP). Cova Garcia, Sutil and Rausseo 1966a: 173 ( $\delta^*$ ); Forattini, Rabello and Cotrim 1970: 50 (type info.); Sirivanakarn 1983: 274 (syn.).

**spathulatus** Forattini and Sallum, 1987b: 167 ( $\delta^*$ ). Fig. 105.

Holotype  $\delta$ : Santa Helena Farm, Sao Joao da Boa Vista, Sao Paulo, Brazil (FSP).

Forattini, Sallum and Kakitani 1988: 538 (type info.).

DISTRIBUTION: Brazil.

**spissipes** (Theobald, 1903: 242) ( $\varphi^*$ ; *Melanoconion*). Figs. 105, 106.

Holotype  $\varphi$ : Trinidad (NHM).

Bourroul 1904: 70 (Brazil); Howard, Dyar and Knab 1915: 312 ( $\varphi$ ; tax.); Bonne and Bonne-Wepster 1925: 268 (in part  $\varphi$ ; Suriname; misidentification of  $\delta$ , see Takahashi 1968); Dyar 1925c: 169 (Panama); Dyar 1925d: 214 (Venezuela); Martini 1935: 60 (Mexico, Belize); Foote 1954: 94 (tax.); Barreto-Reyes 1955: 60 (Colombia); Prosen, Carcavallo and Martinez 1963: 110 (Bolivia); Takahashi 1968: 329 ( $\delta^*$   $\varphi^*$ ; tax.); Stone 1970: 164 (Honduras); Heinemann and Belkin 1979: 108 (Ecuador); Darsie and Hobbs 1982: 73 (Guatemala); Sirivanakarn 1983: 278 ( $\delta^*$   $\varphi^*$ ).

DISTRIBUTION: Belize, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guatemala, Honduras, Mexico, Panama, Suriname, Trinidad, Venezuela.

*fur* (Dyar and Knab, 1907a: 13) ( $\varphi$ ; *Melanoconion*). Holotype  $\varphi$ : Colon, Canal Zone, Panama (NMNH). Bonne-Wepster and Bonne 1921: 20 (syn. with



*spissipes*); Lane 1951: 334 (resurrected from syn.); Foote 1954: 94 (syn. with *spissipes*); Takahashi 1968: 329 (tax.).

*menytes* Dyar, 1918b: 125 (♂). Holotype ♂: Trinidad River, Panama (NMNH). Dyar 1923d: 190 (♂\*); Dyar 1928: 286 (♂\*); Floch and Abonnenc 1942: 6 (French Guiana; as *menytes*); Rozeboom and Komp 1950: 93 (♂\*; type loc. info.); Cova Garcia, Sutil and Rausseo 1966a: 213 (♂\*); Takahashi 1968: 331 (syn.).

*haynei* Komp and Curry, 1932: 82 (♂\*). Holotype ♂ (genitalia only): Mojinga Swamp, lower Chagres River, Canal Zone, Panama (NMNH). Komp 1935: 3 (syn. with *menytes*); Stone and Knight 1957: 59 (type info.).

*sursumptor* Dyar, 1924a: 123 (♂). Fig. 107.

Lectotype ♂: Baranquilla, [Magdalena], Colombia (NMNH).

Dyar 1924b: 183 (tax.); Dyar 1928: 329 (♂\* ♀ L\*); Anduze 1941: 16 (Venezuela); Rozeboom and Komp 1950: 96 (♂\*; tax.); Lane 1953: 489 (♂\* ♀ L\*); Foote 1954: 90 (P\* L\*; tax.); Galindo and Blanton 1955: 72 (Panama); Stone and Knight 1957: 56 (lectotype desig.); Cova Garcia, Sutil and Rausseo 1966a: 209 (♂\*).

DISTRIBUTION: Colombia, Ecuador (Appendix I), Panama, Venezuela.

*ligator* Dyar, 1924a: 123 (♂ ♀ L). Lectotype ♂: Baranquilla, [Magdalena], Colombia (NMNH). Dyar 1924b: 183 (syn.); Stone and Knight 1957: 52 (lectotype desig.).

*taeniopus* Dyar and Knab, 1907b: 100 (♀). Figs. 107, 108; Note 13.

Holotype ♀: Bluefields, Nicaragua (NMNH).

Rozeboom and Komp 1950: 96 (in part, tax.; misidentification of ♂\*; see *pedroi*); Barreto-Reyes 1955: 59 (Colombia); Prosen, Carcavallo and Martinez 1963: 110 (Bolivia); Galindo 1969: 83 (tax.); Morales-Ayala 1971: 143 (Peru); Sirivanakarn and Belkin 1980: 8 (♂ ♀; tax.); Sirivanakarn 1983: 265 (♂\* ♀\*); Mitchell and Darsie 1985: 285, 314 (Argentina).

DISTRIBUTION: Argentina, Bahamas, Belize, Bolivia, Cayman Islands, Colombia, Costa Rica (Appendix I), Dominican Republic, French Guiana, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Peru, Puerto Rico, Venezuela.

*annulipes* (Theobald, 1907: 512) (♀\*; **Melanoconion**). Holotype ♀: Red Hills, [Kingston, Surrey], Jamaica (NHM). Edwards 1932: 213 (rejected name); Belkin 1969a: 28 (tax., syn.); Belkin 1969b: 68 (re-emphasis of Edwards 1932); Townsend 1990: 43 (type info.).

*opisthopus* Komp, 1926: 44 (♂ ♀). Lectotype ♂: Puerto Castillo River, Honduras (NMNH). Dyar 1928: 294 (♂\*); Pratt, Wirth and Denning 1945: 245 (Puerto Rico); Rozeboom and Komp 1950: 94 (♂\*); Lane 1953: 403 (♂\* L\*); Carpenter and LaCasse 1955: 310 (in part, ♂\*; misidentification of L\*, see *cedeccei*; Mexico); Stone and Knight 1957: 54 (lectotype desig.); Belkin, Heinemann and Page 1970: 82 (♂\* ♀\* P\* L\*); Bertram 1971: 745 (Belize); Scherer et al. 1971: 969 (Venezuela); Fauran and Pajot 1974: 106 (French Guiana); Belkin and Heinemann 1975: 372, 377 (Bahamas, Cayman Islands); Mattingly 1976: 227 (E\*); Cupp et al. 1979: 1060 (Guatemala); Sirivanakarn and Belkin 1980: 7 (syn.).

*mychonde* Komp, 1928 (in Dyar 1928: 295) (♂). Holotype ♂ (genitalia only): Almirante, [Bocas del Toro], Panama (NMNH). Komp 1935: 3 (syn. with *opisthopus*).

*tecmarsis* Dyar, 1918b: 124 (♂, ♀). Figs. 108,109.

Lectotype ♂: Trinidad River, Panama (NMNH).

Dyar 1925d: 214 (Venezuela); Dyar 1928: 313 (♂\* ♀); Rozeboom and Komp 1950: 97 (♂\*; lectotype desig.); Lane 1953: 420 (♂\* ♀); Cova Garcia, Sutil and Rausseo 1966a: 167 (♂\*); Heinemann and Belkin 1977a: 284 (Costa Rica); Stone and Knight 1957: 57 (type info.); Sirivanakarn 1983: 280 (♂\*).

DISTRIBUTION: Colombia (Appendix I), Costa Rica, Panama, Venezuela.

*terebor* Dyar, 1920a: 56 (♂). Figs. 109,110.

Holotype ♂ (genitalia only): Surinam (NMNH).

Dyar 1928: 304 (♂\*); Rozeboom and Komp 1950: 97 (♂\*); Lane 1953: 449 (♂\*).

DISTRIBUTION: Suriname.

*theobaldi* (Lutz, 1904) (in Bourroul 1904: 70) (♀\*; **Melanoconion**). Figs. 110-112.

Lectotype ♀: Lagoa, Sao Paulo, Brazil (NHM).

Bonne and Bonne-Wepster 1925: 293 ( $\delta^*$  ♀ L); Cerqueira 1943: 34 (Bolivia); Belkin 1968: 20 (type info.); Belkin, Schick and Heinemann 1971: 25 (lectotype desig., type info.); Morales-Ayala 1971: 143 (Peru); Mitchell and Darsie 1985: 285, 314 (Argentina); Forattini and Sallum 1989c: 201 ( $\delta^*$  ♀\* P\* L\*; tax.).

**DISTRIBUTION:** Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Suriname, Venezuela.

*chrysonotum* Dyar and Knab, 1908: 57 ( $\delta$  ♀). Lectotype  $\delta$ : Ancon, Canal Zone, Panama (NMNH). Howard, Dyar and Knab 1913: Figs. 78, 362 ( $\delta^*$  L\*); Howard, Dyar and Knab 1915: 310 ( $\delta$  ♀ L); Dyar 1928: 326 ( $\delta^*$  ♀ L\*; Suriname, Venezuela); Kumm, Komp and Ruiz 1940: 392 (Costa Rica); Rozeboom and Komp 1950: 88 (in part; lectotype desig., misidentification of  $\delta$ , see Forattini and Sallum 1989c); Rozeboom and Komp 1950: 88 ( $\delta^*$ ); Lane 1951: 410 (syn. with *spissipes*); Martinez Palacios 1952: 83 (Mexico); Foote 1954: 31 (P\* L\*; resurrected from syn., Colombia, Honduras); Stone and Knight 1957: 45 (type info.); Cova Garcia, Sutil and Rausseo 1966a: 38 ( $\delta^*$ ); Bertram 1971: 745 (Belize); Heinemann and Belkin 1977b: 453 (Nicaragua); Sirivanakarn 1978b: 479 ( $\delta^*$  ♀\*); Heinemann and Belkin 1979: 107 (Ecuador); Darsie and Hobbs 1982: 73 (Guatemala); Sirivanakarn 1983: 279 (♀\*); Forattini and Sallum 1989c: 201 (syn.).

*aurilatus* Senevet and Abonnenc, 1939: 94 ( $\delta^*$  L\*). Holotype  $\delta$ : French Guiana (NE). Rozeboom and Komp 1950: 88 (syn.); Belkin 1968: 53 (type info.).

*tournieri* Senevet and Abonnenc, 1939: 105 ( $\delta^*$  L\*). Fig. 112.

Holotype  $\delta^*$ : Crique Mangué, Saut-Tigre, [Inini], French Guiana (NE).

Rozeboom and Komp 1950: 97 ( $\delta^*$ ); Foote 1954: 95 (L\*); Belkin 1968: 53 (type info.).

**DISTRIBUTION:** French Guiana.

*trifidus* Dyar, 1921d: 115 ( $\delta^*$  ♀). Figs. 112-114.

Lectotype  $\delta$ : Rio Tiribi, Costa Rica (NMNH).

Bonne and Bonne-Wepster 1925: 282 ( $\delta$  ♀); Dyar 1928: 286 ( $\delta^*$  ♀); Aguilar 1931: 40 (El Salvador); Dampf 1941: 253 ( $\delta^*$ ; Mexico); Rozeboom and Komp 1950: 97 ( $\delta^*$ ; lectotype desig., Panama); Lane 1953: 412 ( $\delta^*$  ♀); Stone and

Knight 1957: 57 (type info.); Stone, Knight and Starcke 1959: 276 (Honduras);  
Sirivanakarn 1983: 279 ( $\delta^*$   $\varphi^*$ ); Clark-Gil and Darsic 1983: 256 (Guatemala).

DISTRIBUTION: Costa Rica, El Salvador, Guatemala, Honduras, Mexico,  
Panama.

*trigeminatus* Clastrier, 1970a: 473 ( $\delta^*$ ). Fig. 114.

Holotype  $\delta$ : Foret du Gallion, French Guiana (MNHP).

Heinemann and Belkin 1979: 94 (Brazil).

DISTRIBUTION: Brazil, French Guiana.

*trilobulatus* Duret and Barreto, 1956: 93 ( $\delta^*$ ). Fig. 114.

Holotype  $\delta$ : Rio Tamandua, Ribeirao Preto, Sao Paulo, Brazil (FMRP).

DISTRIBUTION: Brazil.

*trisetosus* Fauran, 1961a: 1 ( $\delta^*$ ). Fig. 114.

Holotype  $\delta$ : confluence of Oyac and Conte Rivers, Saint Antoine, French  
Guiana (MNHP).

DISTRIBUTION: French Guiana.

*unicornis* Root, 1928 (*in* Dyar 1928: 291) ( $\delta$   $\varphi$  L). Fig. 115.

Lectotype  $\delta$  (genitalia only): [Maracay, Aragua], Venezuela (NMNH).

Rozeboom and Komp 1950: 97 ( $\delta^*$ ; lectotype desig.); Lane 1953: 483 ( $\delta^*$   $\varphi$   
L); Foote 1954: 118 ( $P^*$   $L^*$ ); Stone 1961: 47 (French Guiana); Cova Garcia,  
Sutil and Rausseo 1966a: 171 ( $\delta^*$ ); Cova Garcia, Sutil and Rausseo 1966b: 207  
( $L^*$ ).

DISTRIBUTION: French Guiana, Venezuela.

*v. villifer* Komp, 1936b: 320 ( $\delta^*$   $\varphi$  L). Figs. 115, 116.

Lectotype  $\delta$ : Barro Colorado Island, Gatun Lake, Canal Zone, Panama  
(NMNH).

Rozeboom and Komp 1950: 97 ( $\delta^*$ ; lectotype desig.); Lane 1953: 421 ( $\delta^*$  ♀ L\*); Foote 1954: 120 (L\*); Heinemann and Belkin 1977b: 443 (Honduras).

DISTRIBUTION: Honduras, Panama.

*vidali* Floch and Fauran, 1954: 4 ( $\delta^*$ ). Fig. 116.

Holotype  $\delta$ : Moulin-de-Vidal, Ile de Cayenne, French Guiana (PIG).

DISTRIBUTION: French Guiana.

*vomerifer* Komp, 1932: 79 ( $\delta^*$ ). Figs. 116,117.

Holotype  $\delta$ : Almirante, [Bocas del Toro], Panama (NMNH).

Rozeboom and Komp 1950: 97 ( $\delta^*$ ); Stone 1961: 47 (Trinidad); Forattini 1965: 185 ( $\delta^*$ ); Aitken and Galindo 1966: 202 (tax.; French Guiana); Floch and Kramer 1965: 1 (tax.); Galindo 1969: 87 (tax.); Barreto-Reyes and Lee 1969: 431 (Colombia); Heinemann and Belkin 1978a: 394 (Venezuela); Heinemann and Belkin 1979: 108 (Ecuador); Sirivanakarn 1979: 139 (Brazil); Sirivanakarn and Jakob 1982a: 194 ( $\delta^*$ ); Sirivanakarn 1983: 278 ( $\delta^*$ ).

DISTRIBUTION: Brazil, Colombia, Ecuador, French Guiana, Panama, Trinidad, Venezuela.

*wepsterae* Komp and Rozeboom, 1951: 127 ( $\delta^*$ ; as *wepsteri*). Fig. 117; Note 14.

Holotype  $\delta$  (genitalia only): Paramaribo, Surinam (NMNH).

Stone, Knight and Starcke 1959: 276 (emend. to *wepsterae*).

DISTRIBUTION: Suriname.

*ybarraisi* Dyar, 1920a: 57 ( $\delta$  L). Figs. 117,118.

Holotype  $\delta$ : Paramaribo, Surinam (NMNH).

Dyar 1928: 302 ( $\delta^*$  L\*); Senevet and Abonnenc 1939: 131 (French Guiana); Rozeboom and Komp 1950: 97 ( $\delta^*$ ); Lane 1953: 433 ( $\delta^*$  L; Brazil); Foote 1954: 96 (L\*); Stone 1967: 217 (Trinidad); Forattini, Rabello and Cotrim 1970: 50 (Venezuela).

DISTRIBUTION: Brazil, French Guiana, Suriname, Trinidad, Venezuela.

*jonistes* Dyar, 1920a: 76 (♂). Holotype ♂: Surinam (NMNH). Dyar 1928: 330 (♂\*); Komp 1935: 7 (syn.).

*zeteki* Dyar, 1918b: 122 (♂; as *zeteci*). Figs. 118, 119; Note 9.

Holotype ♂: Gatun, Canal Zone, Panama (NMNH).

Dyar 1923d: 188 (♂\*; as *zeteci*); Dyar 1928: 339 (♂\*; as *zeteci*). Komp 1935: 8 (♂; as *zeteci*); Rozeboom and Komp 1950: 98 (♂\*; tax., emend. to *zeteki*); Lane 1953: 438 (♂\*; French Guiana); Cova Garcia, Sutil and Rausseo 1966a: (♂\*); Stone 1967: 217 (Trinidad); Barreto-Reyes and Lee 1969: 431 (Colombia); Bertram 1971: 745 (Belize); Panday 1975b: 298 (Suriname); Sirivanakarn 1983: 279 (♀\*); Forattini et al. 1989: 15 (Brazil).

DISTRIBUTION: Belize, Brazil, Colombia, French Guiana, Nicaragua (Appendix I), Panama, Paraguay (Appendix I), Suriname, Trinidad, Venezuela.

*loturus* Dyar, 1925d: 214 (♂). Holotype ♂: Catatumbo River, [Zulia], Venezuela (NMNH). Dyar 1928: 342 (♂\* ♀); Komp 1935: 9 (syn.).

*Nomina Dubia*

- aikenii* (Aiken and Rowland, 1906: 34) (L\*, *Gnophodeomyia*). Note 1. Syntypes L: New Amsterdam, [Berbice], British Guiana [Guyana] (NE). Dyar 1918a: 110 (replacement name, as *aikenii* Aiken (1907), for *inornata* Theobald, 1905); Dyar and Knab 1919: 7 (tax.); Stone, Knight and Starcke 1959: 266 (corrected authorship and date); Belkin 1968: 12 (type info.); Belkin 1970: 59 (*nomen dubium*).
- Asebeomyia* Aiken, 1911: 193 (A; new genus). Haplotype: *Culex epirus* Aiken. Edwards 1932: 212 (syn. with *Melanoconion*); Sirivanakarn 1983: 273 (*nomen dubium*).
- chrysothorax* (Peryassu, 1908: 244, 354, Fig. 50) (♂ ♀ L\*; *Melanoconion*). Note 15. Lectotype ♂: Copacabana, Rio de Janeiro, (Guanabara), Brazil (IOC). Belkin, Schick and Heinemann 1971: 23 (lectotype desig., type info.); Sirivanakarn 1983: 273 (*nomen dubium*).
- chrysothorax* (Newstead and Thomas, 1910: 147, non Peryassu, 1908) (♂ ♀; *Neomelanoconion*). Lectotype ♀: Inner Flores swamp, Pensador, nr. Manaoas [Manaus], Brazil (BM). Knab 1915: 217 (invalid name); Dyar 1928: 327 (syn. with *theobaldi*); Senevet 1937: 374 (syn. with *chrysonotum*); Rozeboom and Komp 1950: 97 (syn. with *theobaldi*); Belkin 1968: 14 (lectotype desig.); Forattini and Sallum 1989c: 207 (*species inquirenda* [= *nomen dubium*]).
- decorator* Dyar and Knab, 1906a: 218 (L\*). Syntypes L: Tobago (NE). Stone and Knight 1957: 47 (type info.); Sirivanakarn 1983: 273 (type info.; *taxon dubium* [= *nomen dubium*]).
- epirus* Aiken, 1909: 8 (♀). Holotype ♀: Courantyne [Corentyne] River, British Guiana [Guyana] (NE). Aiken 1911: 193 (tax.); Belkin 1968: 15 (tax.); Sirivanakarn 1983: 273 (*nomen dubium*).
- fasciolatus* (Lutz, 1904) (in Bourroul 1904: 70) (A; *Melanoconion*; as *fasciolatum*). Syntypes ♀: Sao Paulo, Brazil (NE). Dyar 1928: 335 (emend. to *fasciolatus*); Belkin, Schick and Heinemann 1971: 23 (type info.); Sirivanakarn 1983: 273 (type info.; *taxon dubium* [= *nomen dubium*]).
- gravitator* Dyar and Knab, 1906a: 218 (L\*). Syntypes L: Cordoba, [Veracruz], Mexico (NE). Stone and Knight 1957: 50 (type info.); Sirivanakarn 1983: 273 (type info.; *taxon dubium* [= *nomen dubium*]).

*humilis* Theobald, 1901: 336 (♂, ♀). Note 15. Lectotype ♂ (genitalia lost): Sao Paulo, Brazil (NHM). Belkin 1968: 16 (lectotype desig.); Sirivanakarn 1983: 273 (*taxon dubium* [= *nomen dubium*]).

*indecorabilis* (Theobald, 1903: 241) (?♂, ♀\*; *Melanoconion*). Note 15. Lectotype ♀: [Belem], Para, Brazil (NHM). Belkin 1968: 16 (lectotype desig.); Sirivanakarn 1983: 273 (*taxon dubium* [= *nomen dubium*]).

*lugens* Lutz, 1905: 28 (♂ ♀). Syntypes ♂ ♀: Lagoa, Sao Paulo, Brazil (IOC). Sirivanakarn 1983: 273 (*taxon dubium* [= *nomen dubium*]).

*nigrescens* (Theobald, 1907: 248) (♂; *Danielsia*). Note 15. Holotype ♂ (genitalia lost): Santo Amaro, Sao Paulo, Brazil (NHM). Dyar 1928: 333 (? *Mochlostyrax*); Rozeboom and Komp 1950: 93 (type info.); Sirivanakarn 1983: 273 (*taxon dubium* [= *nomen dubium*]); Townsend 1990: 16 (type info.).

*nigricorpus* (Theobald, 1901: 231) (♀; *Aedes*). Note 15. Lectotype ♀: Itacoatiara (Amazonas), Brazil (NHM). Howard, Dyar and Knab 1915: 322 (to genus *Culex*); Dyar 1928: 334 (? *Mochlostyrax*); Belkin 1968: 18 (lectotype desig.); Sirivanakarn 1983: 273 (*taxon dubium* [= *nomen dubium*]); Townsend 1990: 110 (type info.).



## TAXONOMIC NOTES

1. Townsend (1990) listed *Gnophodeomyia inornata* Theobald, 1905 as a valid species of *Melanoconion*, whereas it was listed as "subgenus uncertain" by Knight and Stone (1977). Townsend based this change on the synonymy of *Gnophodeomyia* with *Melanoconion*. However, as pointed out by Belkin (1970), Dyar and Knab (1919) rejected *inornata* Theobald, 1905 as a junior secondary homonym of *inornata* Williston, 1893 (*in* Riley 1893), a species of *Culiseta* (see also Dyar 1918a), and replaced it with *aikenii* Aiken, 1907. The latter name was recognized until Belkin (1970) considered it a *nomen dubium*. In addition, Belkin (1970) stated that the identity of *Gnophodeomyia inornata* "may never be determined with certainty," but "it is not '*aikenii*' of current usage." Since the identity of the mosquito bearing these names remains uncertain, they are both excluded from the subgenus *Melanoconion*.
2. Sirivanakarn and Galindo (1980), in describing *Culex adamesi*, stated that this species, together with *Culex crybda* Dyar, *Culex epanastasis* Dyar, and *Culex pedroi* Sirivanakarn and Belkin, comprise a distinct complex of the Spissipes Group (also see Sirivanakarn and Belkin 1980). They further stated that the male genitalia are identical for *Culex adamesi*, *Culex pedroi*, and *Culex crybda* (identification of these species is based on external ornamentation of the adults). Forattini and Sallum (1985) stated that the male genitalia of *Culex ribeirensis* did not differ remarkably from those of *Culex adamesi* and *Culex crybda*. For the sake of completeness we have included illustrations of the male genitalia for these species, but the reader is referred to Sirivanakarn and Galindo (1980), Sirivanakarn and Belkin (1980), and Forattini and Sallum (1985) for diagnostic characters in other life stages which distinguish them. Figure 2 of the male genitalia of *Culex adamesi* is based on a paratype from Panama with the following collection data: PA 666, Bocas del Toro, Almirante, "camp"; 14 or 15 Apr 1964, light trap in secondary growth.
3. Duret (1953) published a key including illustrations of the male gonostyli for the *Melanoconion* of Argentina. Included in this publication were four new species: *Culex aliciae*, *Culex orfilai*, *Culex bejaranoi*, and *Culex misionensis*. No additional information was provided until Duret (1954) again listed these species as new and provided detailed descriptions and information on types and type locality for each. Stone, Knight and Starcke (1959) listed the date of publication for these species as 1953, but incorrectly cited page numbers from both the 1953 and 1954 papers (the second paper by Duret, while dated 1953, was not published until 1954). Knight and Stone (1977) listed the date of publication as "1953, 1954" for *Culex aliciae* and *Culex misionensis*, but listed the date unchanged from Stone, Knight and Starcke (1959) for *Culex orfilai*

and *Culex bejaranoi*. Since publication of a new name accompanied by characters, stated in words, that differentiate the taxon (a key in the case of Duret 1953) makes the name available (Article 12a(i) of the *Code*), Duret 1954 is not included as part of the authorship of these four species.

4. We have emended the spelling of *arboricola* from the original spelling *arboricolus*. According to Article 31b of the *Code*, adjectival species-group names must agree in gender with the generic name with which it is combined. Since the suffix *-colus* can be either masculine or feminine, we have changed it to *-cola* to agree with the masculine genus *Culex*. This same reasoning was evidently followed by Stone (1967), who emended *rabanicola* (from *rabanicolus*) and Knight and Stone (1977) who emended *cavernicola* (from *cavernicolus*, =*putumayensis*).
5. The collection of the Faculdade de Medicina, University of Paris (FMP) was listed by Knight and Stone (1977) as the type depository for the following nominal species: *advieri* Senevet, (= *atratus* Theobald), *bonneti* Senevet, (= *elevator* Dyar and Knab), *Culex madininensis* Senevet, *radiatus* Senevet and Abonnenc (= *pilosus* Dyar and Knab), and *Culex breviculus* Senevet and Abonnenc (currently in the subgenus *Tinolestes*). This collection subsequently has been transferred to the Museum National d'Histoire Naturelle, Paris (MNHP) (B. Geoffroy, personal communication).
6. The specific name *xivylis* Dyar, 1920 has been spelled in various ways by different authors: *xivylis* (the original spelling), *xyvilis* (Bonne-Wepster and Bonne 1925), and *xivilis* (Dyar 1928, Komp 1935). Dyar (1928) synonymized *cuchyx* Dyar and Shannon, 1924 with *xivylis* (as *xivilis*), and Komp (1935) later synonymized this nominal species (as *xivilis*) with *Culex bastagarius*. Rozeboom and Komp (1950), retaining the original spelling, noted that the description and illustration of "*xivilis*" was based on the type genitalia of *cuchyx*, and discovered that the two were not synonymous. These authors also found that *xivylis* was actually synonymous with *Culex intricatus*, not *Culex bastagarius*. Stone, Knight and Starcke (1959) and Knight and Stone (1977) retained the original spelling, but erroneously listed *xivylis* as a synonym of *Culex bastagarius*.
7. The original illustration of the genitalia of *Culex crybda* provided in Fig. 31 is based on specimens collected for the Mosquitoes of Middle America Project (Belkin and Heinemann 1978 and Heinemann, Aitken and Belkin 1980, respectively) as follows: PANAMA: PA 249; Bocas del Toro, Punta de Pena; 30m, 22 Apr 1963; adults resting in forest, 0700-1100 h, WRBU Prep. No. 91-523. TRINIDAD: TR 729-102; Nariva, Bush Forest, Nariva Swamp, 13 Sept 1964, progeny rearings from oviposition trap.

8. The name *Culex apateticus* (=educator) was first associated with an illustration of the male genitalia in volume II of *The mosquitoes of the Americas* by Howard, Dyar and Knab (1913: Pl. 13, Fig. 91). While volumes I and II are both dated 1912 on the title page, volume I was first issued on January 21, 1913 and volume II was first issued on February 24, 1913. Neither volume discussed this species, but the name was proposed in association with an illustration in volume II, which makes it available under Article 12b(7) of the *Code*. Subsequently, volume III in this series (1915) used the name "*apateticus*" with a description of the male and female of this species, and referenced the illustration in volume II. In addition, volume III provided the first information on the type series and collection sites. In 1918, Dyar reported that the type series consisted of a mixed collection of both *Culex educator* and *Culex elevator*, and specifically noted that specimen number 454 and two males numbered 522 were *Culex educator*. This series was accessioned into the U.S. National Collection as U.S.N.M. No. 40778. Stone and Knight (1957) selected one of these males, number 522 on slide 512, as the lectotype, using the name *Culex apateticus* and fixing the type locality for the first time. The lectotype slide also has *Culex apateticus* written on the label. Stone, Knight and Starcke (1959), realizing the unjustified emendation of Howard, Dyar and Knab (1915), listed the original spelling (*apateticus*). The original spelling is used here because it appears that the spelling used by Howard, Dyar and Knab (1915) was a *lapsus calami*, as no effort was made by these authors to justify the emendation (see Article 33b of the *Code*).
9. Rozeboom and Komp (1950) synonymized *ensiformis* with *zeteki* based on features of the male genitalia. Foote (1954), following Rozeboom and Komp (1950), described the immature stages of *Culex zeteki* based on larval and pupal exuviae associated with the type specimens of *Culex ensiformis* from Suriname. Belkin (1968) restored *Culex ensiformis* to species status, and attributed the description of Foote (1954) to this species and not *Culex zeteki* as listed by Knight and Stone (1977).
10. The type specimens of four nominal species described by Floch and Abonnenc (1945b, 1945c) were listed as non-extant or questionably in the Pasteur Institute in Paris by Knight and Stone (1977). These nominal species include *Culex equinoxialis*, *Culex cauchensis* (currently in the subgenus *Tinolestes*), *cayennensis* (=portesi), and *cavernicola* (=putumayensis). Types for these species were examined and reported on by Belkin (1968). However, since subsequent reports by Harrison (1973) and Rodhain and Boutonnier (1984) failed to locate these types in the Pasteur Institute, we consider them non-extant.
11. *Culex evansae* was described by Root (1927b) from an unspecified number of

adults, and while the type locality was not specifically indicated, he stated that the species had been collected at both Mage and Sant Anna, Brazil. Rozeboom and Komp (1950) selected a lectotype male labeled "slide no. 30-1, Mage, Brazil, N.C. Davis, 11-26-25." Stone and Knight (1957) invalidated this designation stating: "Root's no. 30-1 was from Porte das Caixas, Brazil, February 24, 1925, and is one of the syntypes of *C. exedrus* Root." Stone and Knight also stated that the types of *Culex evansae* were "from Mage, Brazil, February 26, 1925, F.M. Root (no. 34)," and that "we select the male, with terminalia on slide no. 34a as lectotype." Examination of the Smithsonian Institution type registry catalog for *Culex evansae* shows that only two syntypes were used for the original description, a male and a female. It is obvious that Rozeboom and Komp (1950) and Stone and Knight (1957) were referring to the same male specimen as the lectotype. Rozeboom and Komp evidently copied the collection number from the lectotype slide of *Cx. exedrus* Root instead of *Culex evansae*, since these slides are adjacent to one another in the NMNH type specimen cabinet (as pointed out by Stone and Knight 1957). Stone and Knight (1957) also listed the collector incorrectly, F.M. Root instead of N.C. Davis. In addition, these authors correctly stated that the "larval and pupal skins of these two specimens are on one slide, and so it is impossible to determine with certainty which larval skin is associated with the male." However, the pupal exuviae can be definitely associated. Therefore, the type series of *Culex evansae* consists of a lectotype male with its genitalia mounted on a microscope slide, a paralectotype female, and a microscope slide with two larval and two pupal exuviae collected from Mage, Brazil, February 26, 1925, Dr. N.C. Davis collector.

12. Knight and Stone (1977) listed the date of publication for *mastigia* (= *pilosus*) as volumes II and III of the mosquitoes of the Americas series by Howard, Dyar and Knab (1913, 1915) (see also Note 8 for *apeteticus*). Since the publication of a species-group name in association with an illustration before 1931 makes it available by indication (Article 12b(7) of the Code), the date of publication for *mastigia* is 1913.
13. Townsend (1990) followed Knight and Stone (1977) in listing *annulipes* Theobald as a synonym of *opisthopus* Komp. Neither work, however, cites Edwards (1932) who rejected *annulipes* Theobald as a junior secondary homonym of *annulipes* Meigen, 1830, which is currently regarded as a valid species of *Aedes* (see Belkin 1969b).
14. Stone, Knight and Starcke (1959) spelled this species name as *wepsterae* and not *wepsteri* as in the original description by Komp and Rozeboom (1951). While no explanation was given, this change does follow Article 31a(ii) of the Code. Since Komp and Rozeboom (1951) clearly state that this species was

named in honor of Mrs. Bonne-Wepster, we have followed the corrected spelling as listed by Stone, Knight and Starcke (1959).

15. Townsend (1990) listed the following species names as valid, although Sirivanakarn (1983) considered them as *taxa dubia* (= *nomina dubia*): *humilis* Theobald, 1901; *indecorabilis* Theobald, 1903; *nigrescens* Theobald, 1907; *nigricorpus* Theobald, 1901; and *chrysothorax* Peryassu, 1908.

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## APPENDIX I

Previously unpublished distribution records for species of *Melanoconion* based on specimens deposited in the NMNH. Abbreviations used to indicate the source of the material are SAMP (Systematics of *Aedes* Mosquito Project), MOMA (Mosquitoes of Middle America Project), and JPD Prep. No. (male genitalia preparation from the J. Pedro Duret Collection). The life stages collected are listed in parentheses following the collection data.

**bastagarius.** NICARAGUA: Zelaya, 1.IX.62, (JPD Prep. No. 4475); Chentales, Puerto Diaz, 22.VIII. 62, (JPD Prep. No. 3605).

**batesi.** COSTA RICA, Canton de Aguirre, Quepos, 21.xi.56 (JPD Prep. No. 4482). ECUADOR: SAMP collection 26, SAMP Accession No. 638, Napo, in pond, 13 May 1977, Y.-M. Huang (2 ♂ Pe Le; 1 ♀ Pe Le); SAMP collection 40, same data as collection 26, in large ground pool, 25 May 1977 (23 ♂ Pe; 6 ♀ Pe; 1 ♀ Pe Le).

**clarki.** VENEZUELA: Estado Guarico, 12.XI.55 (JPD Prep. No. 6903).

**conspirator.** TRINIDAD: MOMA collection TR 1235, Pinti, Pinto Rd, large ground pool, 1-VII-65 (11 ♂ Pe; 1 ♀ Pe; 7 L).

**dunni.** NICARAGUA: Zelaya, Rama, 1.IX.62 (JPD Prep. No. 3668).

**dureti.** VENEZUELA: Maracay 1927, Rozeboom Collection (1 ♂) [no other data available].

**educator.** PERU: MOMA collection PER 106, Loreto, Iquitos, 23 Nov 1972, light trap (1 ♂) [previously reported as *Cx. (Mel.)* sp. undetermined by Heinemann and Belkin 1979: 111].

**egcymon.** COLOMBIA: Santander, Cucuta, 22.III.61 (JPD Prep.No. 1856); Choco, Rio Sucion, 24.VII.60 (JPD Prep. No. 3269).

**elevator.** GUATEMALA: Dept. de Izabal, El Sauce, 25.IX.55 (JPD Prep. Nos. 161, 165, 166, 169, and 170).

**equinoxialis.** BRAZIL: Terr. de Roraima, Caracarai, 4.VII.64 (JPD Prep. No. 1863); Terr. de Roraima, Boa Vista, 7.VII.64 (JPD Prep. No. 1760); Terr. de Roraima, 8.VII.64 (JPD Prep. No. 1804); Estado de Sao Paulo, Coqueiros, 29.9.54 (JPD Prep. No. 4572).

**fairchildi.** BRAZIL: Terr. de Roraima, Caracarai, 7.XII.64 (JPD Prep. No. 1887).

**flabellifer.** VENEZUELA: Monagas, Maturin, 12.XI.59 (JPD Prep. No. 1606). GUATEMALA, Izabal, El Sauce, 25.IX.59 (JPD Prep. No. 3746).

- idottus.** TOBAGO: MOMA collection TOB 101, Saint Patrick, Orange Hill, in pond, 24 Nov 1965 (1 ♂ Pe Le); TOB 102, same data as TOB 101, edge of pond, 24 Nov 1965 (5 ♂ Pe Le; 2 ♀ Pe Le); TOB 103, same data as TOB 101, collected in ditch, 24 Nov 1965 (2 ♂ Pe Le); TOB 106, same data as TOB 101, collected in drain, 24 Nov 1965 (1 ♂ Pe Le). Heinemann, Aitken and Belkin (1980: 274, 275) reported that these collections contained a member of the *Idottus* Group.
- iolambdis.** EL SALVADOR: Dept. de Sonsonate, Metalio, 12.XI.58 (JPD Prep. Nos. 4790, 4795); La Libertad, El Cimarron, 7.VII.58 (JPD Prep. No. 4900).
- johnsoni.** COLOMBIA: Dept. del Meta, Indostan, 10.XII.59 (JPD Prep. No. 3722).
- kummi.** NICARAGUA: Zelaya, Bluefields, 21.VII.62 (JPD Prep. No. 4523); Dept. de Chontales, Villa Somoza, 10.X.62 (JPD Prep. No. 4493).
- limacifer.** EL SALVADOR: Dept. de Sonsonate, Mertalio, 10.VII.58 (JPD Prep. No. 4791).
- oedipus.** ECUADOR: Esmeraldas, San Lorenzo, 7.X.69 (JPD Prep. No. 3953).
- panocossa.** EL SALVADOR: Dept. de San Miguel, Playa Grande, 1.VI.68 (JPD Prep. No. 4787); Dept. de Sonsonate, Metalio, 11.VII.58 (JPD Prep. No. 4792).
- rorotaensis.** SURINAME: MOMA collection SUR 241, Para, Zanderij, pond, 13 April 1967 (3 ♂ Pe Le; 4 ♀ Pe Le) [previously reported as *Cx. (Mel.)* sp. 41 by Heinemann and Belkin 1978a: 454].
- serratimarge.** TRINIDAD: US Naval Base, 4-XI-33; Resting, K.E. Knight, 483 (1 ♂) [no other data available]. GUATEMALA: Dept. de Izabal, Lagunas, 1.X.58 (JPD Prep. No. 4731). NICARAGUA, Dept. de Zelaya, Bluefields, 21.VIII.58 (JPD Prep. No. 4428).
- sursumptor.** ECUADOR: Napo, Tena (JPD Prep. Nos. 3930, 3931, 3929); Napo, Napo, Santa Ines, 23.X.68 (JPD Prep. Nos. 3933, 3940).
- taeniopus.** COSTA RICA: Canton de Aguirre, Savegre, 26.IX.64 (JPD Prep. No. 4562).
- tecmarsis.** COLOMBIA: Choco, Rio Sucio, 20-24 Mar 1960 (JPD Prep. Nos. 3,4,8,9,10 and 13).
- zeteki.** NICARAGUA: Zelaya, Rama, 1.IX.62 (JPD Prep. No. 3674). PARAGUAY: Paraguari, Coronel Oviedo, 13.I.69 (JPD Prep. No. 6072).

## APPENDIX II

Summary of known life stages for the species of the subgenus *Melanoconion*. Entries marked with an X indicate that at least a portion of the life stage has been described, and an asterisk (\*) indicates that at least a portion of that life stage has been illustrated.

SPECIES	♂	♀	P	L	E
<i>abominator</i>	X*	X*	X*	X*	X*
<i>abonnenci</i>	X*	-	-	-	-
<i>adamesi</i>	X*	X*	X*	X*	-
<i>albinensis</i>	X*	X*	X*	X*	-
<i>alcocki</i>	X*	X	-	X*	-
<i>aliciae</i>	X*	-	-	-	-
<i>alogistus</i>	X*	X	X*	X*	-
<i>alvaresi</i>	X*	-	-	-	-
<i>amitis</i>	X*	-	-	-	-
<i>andricus</i>	X*	-	-	-	-
<i>anips</i>	X*	X	-	X*	-
<i>anoplicitus</i>	X*	-	-	-	-
<i>arboricola</i>	X*	-	X*	X*	-
<i>atratus</i>	X*	X*	X*	X*	X*
<i>aureonotatus</i>	X*	-	-	-	-
<i>bahiensis</i>	X*	-	-	-	-
<i>bastagarius</i>	X*	X*	X*	X*	-
<i>batesi</i>	X*	X*	X*	X*	-
<i>bejaranoi</i>	X*	-	-	-	-
<i>bequaerti</i>	X*	X	-	-	-
<i>bifoliolatus</i>	X*	-	-	-	-
<i>carcinophilus</i>	X*	X	X*	X*	-
<i>caribeanus</i>	X*	-	-	-	-
<i>caudatus</i>	X*	-	-	-	-
<i>caudelli</i>	X*	X*	X*	X*	X*
<i>cedecei</i>	X*	X*	X*	X*	X*
<i>changuinolae</i>	X*	-	-	-	-
<i>clarki</i>	X*	-	-	-	-
<i>comatus</i>	X*	-	-	X*	-

## Appendix II (continued).

SPECIES	♂	♀	P	L	E
commevynensis	X*	-	X*	X*	-
comminutor	X*	-	-	X	-
confundior	X*	-	-	-	-
conspirator	X*	X*	X*	X*	-
contei	X*	-	-	-	-
coppenamensis	X*	-	-	X*	-
corentynensis	X*	-	-	-	-
creole	X*	-	-	-	-
crisovaoi	X*	-	-	-	-
crybda	X*	X*	-	-	-
delpontei	X*	X*	-	-	-
distinguendus	X*	X	-	X*	-
dolichophyllus	X*	-	-	-	-
dunni	X*	X	X*	X*	-
dureti	X*	-	-	-	-
dyius	X*	-	-	-	-
eastor	X*	X	X*	X*	-
educator	X*	X*	X*	X*	-
egcymon	X*	X	-	X*	-
elephas	X*	-	-	-	-
elevator	X*	X*	X*	X*	-
ensiformis	X*	X	X*	X*	-
epanastasis	X*	-	X*	X*	-
equinoxialis	X*	-	-	-	-
ernanii	X*	-	-	-	-
ernsti	X*	-	-	X*	-
erraticus	X*	X*	X*	X*	X*
evansae	X*	X	X*	X*	-
fairchildi	X*	-	-	-	-
faurani	X*	-	-	-	-
ferreri	X*	-	-	-	-
flabellifer	X*	-	-	-	-
foliafer	X*	-	X*	X*	-
galindoi	X*	-	-	-	-
galvaoui	X*	-	-	-	-
garcesi	X*	-	-	-	-

## APPENDIX II (continued).

SPECIES	♂	♀	P	L	E
glyptosalpinx	X*	X*	X*	X*	-
guedesi	X*	-	-	-	-
herrerai	X*	-	-	-	-
idottus	X*	-	-	X*	-
inadmirabilis	X*	-	-	-	-
inhibitor	X*	X*	X*	X*	-
innovator	X*	-	-	X*	-
intonsus	X*	-	-	-	-
intrincatus	X*	-	-	X*	-
invocator	X*	X	-	-	-
iolambdis	X*	X*	X*	X*	X*
isabelae	X*	-	-	-	-
jocasta	X*	-	-	-	-
johnnyi	X*	-	-	-	-
johnsoni	X*	-	-	-	-
jubifer	X*	X*	-	X*	-
keenani	X*	-	-	-	-
kummi	X*	-	-	X*	-
lacertosus	X*	X	X*	X*	-
limacifer	X*	-	-	-	-
lopesi	X*	X*	X*	X*	-
lucifugus	X*	-	X*	X*	-
madininensis	X*	-	-	-	-
martinezi	X*	-	X*	X*	-
maxinocca	X*	-	X*	X*	-
mesodenticulatus	X*	-	-	-	-
milwardi	X*	-	-	-	-
misionensis	X*	-	-	-	-
mistura	X*	X	X*	X*	-
mulrennani	X*	X*	X*	X*	-
mutator	X*	X	X*	X*	-
nicaroensis	X*	X	-	-	-
nicceriensis	X*	X	-	X*	-
ocossa	X*	X*	X*	X*	-
oedipus	X*	X*	X*	-	-
olimpioi	X*	-	-	-	-



## APPENDIX II (continued).

SPECIES	♂	♀	P	L	E
orfilai	X*	-	-	-	-
palaciosi	X*	-	-	-	-
panocossa	X*	X	X*	X*	-
paracrybda	X*	-	-	-	-
patientiae	X*	-	-	-	-
pavlovskyi	X*	-	-	-	-
peccator	X*	X*	-	X*	X*
pedroi	X*	X*	X*	X*	-
penai	X*	-	-	-	-
pereyrai	X*	X*	-	-	-
phlabistus	X*	-	-	-	-
phlogistus	X*	X	X*	X*	-
pifanoi	X*	-	-	-	-
pilosus	X*	X*	X*	X*	X*
plectoporpe	X*	X*	X*	X*	-
portesi	X*	X	X*	X*	X*
productus	X*	X	X*	X*	-
psatharus	X*	X	X*	X*	-
putumayensis	X*	X	X*	X*	-
quadrifoliatus	X*	-	-	-	-
quasihybridus	X*	-	-	-	-
rabanicola	X*	-	-	-	-
rabelloi	X*	X*	X*	X*	-
rachoui	X*	-	-	-	-
ribeirensis	X*	X*	X*	X*	-
ronderosi	X*	X	-	-	-
rooti	X*	-	X*	X*	-
rorotaensis	X*	-	-	-	-
sacchettae	X*	X*	X*	X*	-
saramaccensis	X*	X	-	X*	-
sardinerae	X*	X	X*	X*	-
serratimarge	X*	-	X*	X*	-
silvai	X*	-	-	-	-
simulator	X*	X*	X*	X*	-
spathulatus	X*	-	-	-	-

## APPENDIX II (continued).

SPECIES	♂	♀	P	L	E
<i>spissipes</i>	X*	X*	-	-	-
<i>sursumptor</i>	X*	X	X*	X*	-
<i>taeniopus</i>	X*	X*	X*	X*	X*
<i>tecmarsis</i>	X*	X	-	-	-
<i>terebor</i>	X*	-	-	-	-
<i>theobaldi</i>	X*	X*	X*	X*	-
<i>tournieri</i>	X*	-	-	X*	-
<i>trifidus</i>	X*	X*	-	-	-
<i>trigeminatus</i>	X*	-	-	-	-
<i>trilobulatus</i>	X*	-	-	-	-
<i>trisetosus</i>	X*	-	-	-	-
<i>unicornis</i>	X*	X	X*	X*	-
<i>vexillifer</i>	X*	X	-	X*	-
<i>vidali</i>	X*	-	-	-	-
<i>vomerifer</i>	X*	-	-	-	-
<i>wepsterae</i>	X*	-	-	-	-
<i>ybarmis</i>	X*	X*	-	X*	-
<i>zeteki</i>	X*	X*	-	-	-















## APPENDIX III (continued).

	Antigua	Argentina	Bahamas	Barbados	Belize	Bolivia	Brazil	Cayman Islands	Colombia	Costa Rica	Cuba	Curacao	Dominica	Dominican Rep.	Ecuador	El Salvador	French Guiana	Grenada
<i>johnnyi</i>							•											
<i>johnsoni</i>									•									
<i>jubifer</i>							•										•	
<i>keenani</i>																		
<i>kummi</i>									•									
<i>lacertosus</i>																	•	
<i>limacifer</i>										•						•		
<i>lopesi</i>							•											
<i>lucifugus</i>		•							•						•			
<i>madininensis</i>													•					
<i>martinezi</i>		•																
<i>maxinocca</i>																	•	
<i>mesodenticulatus</i>																		
<i>milwardi</i>							•											
<i>misionensis</i>		•					•											
<i>mistura</i>							•		•								•	
<i>mulrennani</i>			•					•			•							
<i>mutator</i>										•						•		
<i>nicaroensis</i>											•							
<i>nicceriensis</i>																		
<i>ocossa</i>		•					•		•						•			
<i>oedipus</i>		•					•								•			
<i>olimpoi</i>							•											
<i>orfilai</i>		•																
<i>palaciosi</i>							•										•	
<i>panocossa</i>					•				•	•						•		







APPENDIX III (continued).

	Antigua	Argentina	Bahamas	Barbados	Belize	Bolivia	Brazil	Cayman Islands	Colombia	Costa Rica	Cuba	Curacao	Dominica	Dominican Rep.	Ecuador	El Salvador	French Guiana	Grenada
<i>saramaccensis</i>															•		•	
<i>sardinerae</i>																		
<i>serratimarge</i>		•				•	•		•								•	
<i>silvai</i>							•											
<i>simulator</i>																		
<i>spathulatus</i>								•										
<i>spissipes</i>					•	•	•		•						•		•	
<i>sursumptor</i>									•						•			
<i>taeniopus</i>		•	•		•	•		•	•	•				•			•	
<i>tecmarsis</i>									•	•								
<i>terebor</i>																		
<i>theobaldi</i>		•			•	•	•		•	•					•		•	
<i>tournieri</i>																	•	
<i>trifidus</i>										•						•		
<i>trigeminatus</i>							•										•	
<i>trilobulatus</i>								•										
<i>trisetosus</i>																	•	
<i>unicornis</i>																	•	
<i>vexillifer</i>																		
<i>vidali</i>																	•	
<i>vomerifer</i>							•		•						•		•	
<i>wepsterae</i>																		
<i>ybarmis</i>							•										•	
<i>zeteki</i>					•		•		•								•	
Country totals	1	27	4	1	9	12	75	6	43	23	6	1	4	6	25	12	66	2



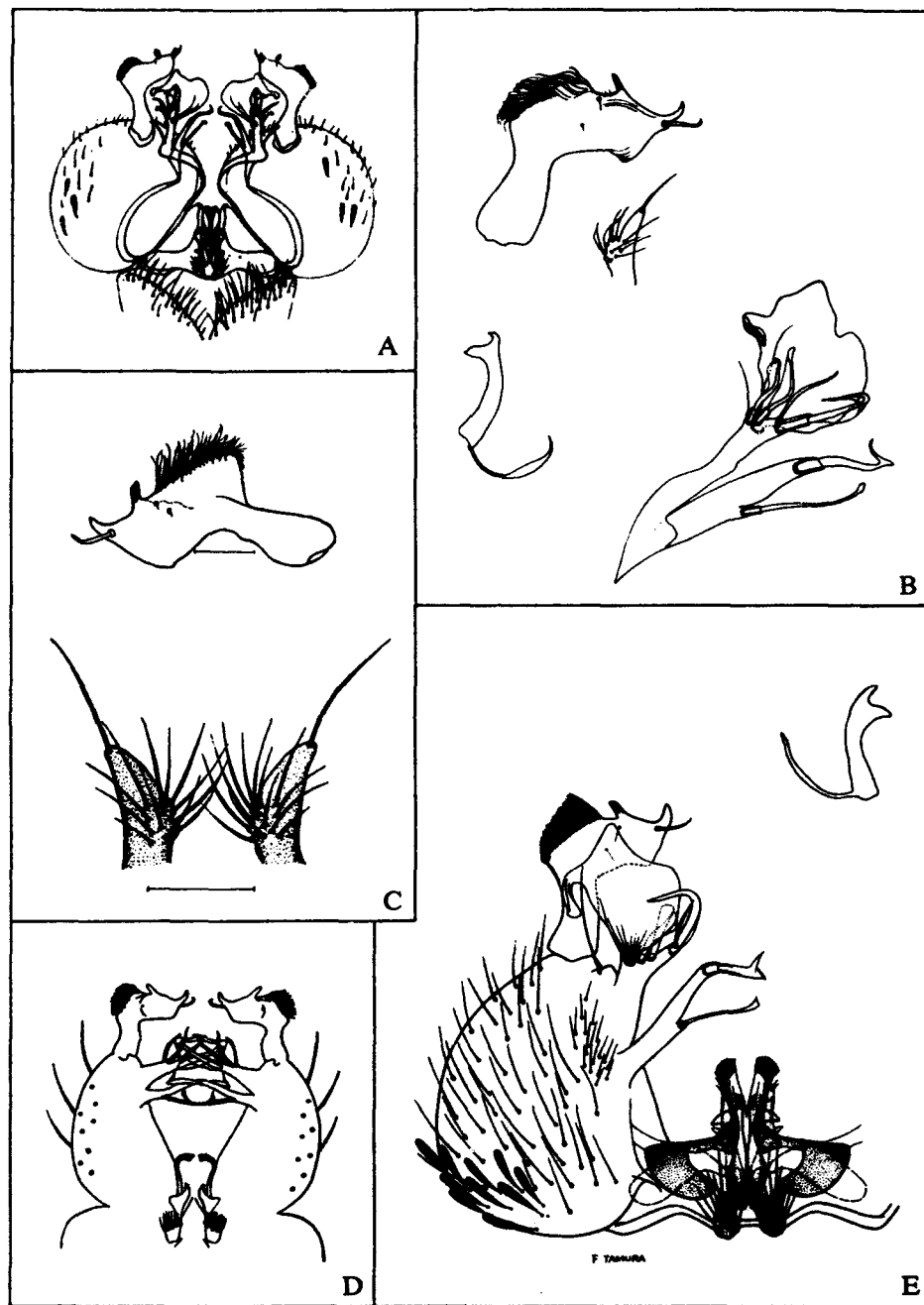
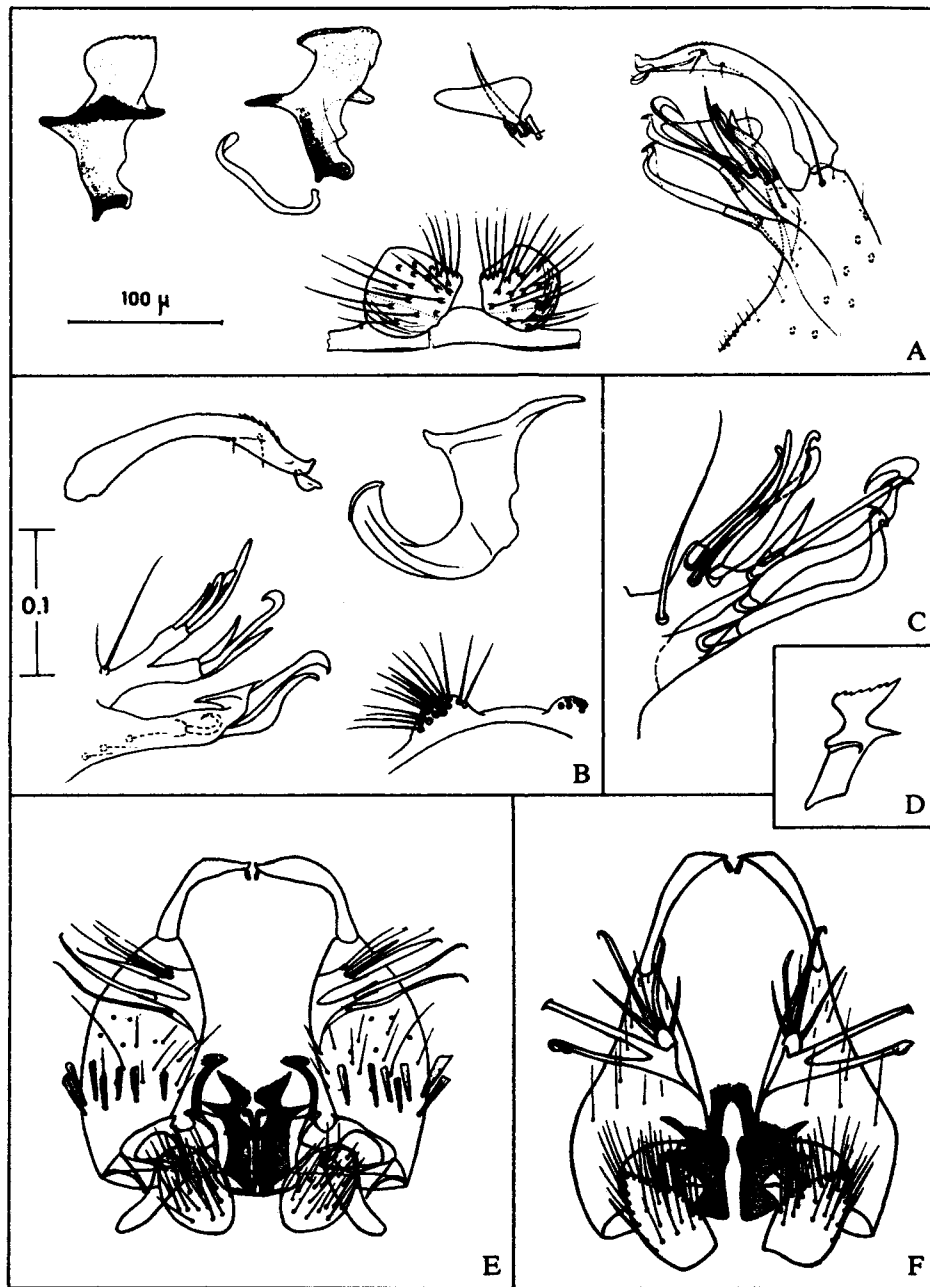


Fig. 1. *Culex abominator*: A, Howard, Dyar and Knab 1913; B, Rozeboom and Komp 1950; C, Wirth 1945; D, Dyar 1928 (as *erraticus*); E, Carpenter and LaCasse 1955.



**Fig. 2.** A, *Culex abonnenci*: Clastrier 1970a. B, *Culex adamesi*: original drawing. C-F, *Culex albinensis*: C, Sirivanakarn 1983; D, Rozeboom and Komp 1950 (as *maroniensis*); E, Bonne and Bonne-Wepster 1925 (as *maroniensis*); F, Bonne and Bonne-Wepster 1925.



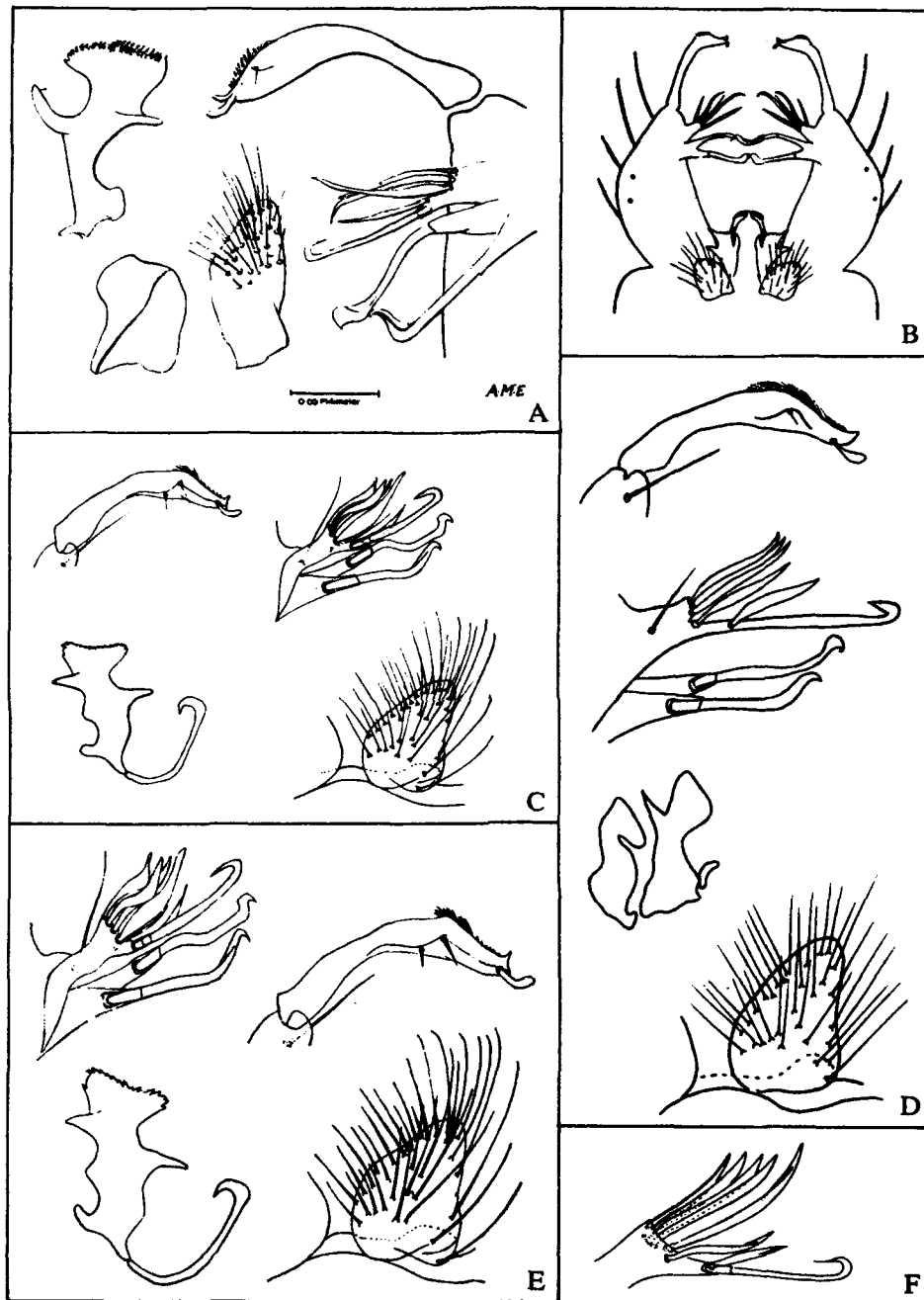
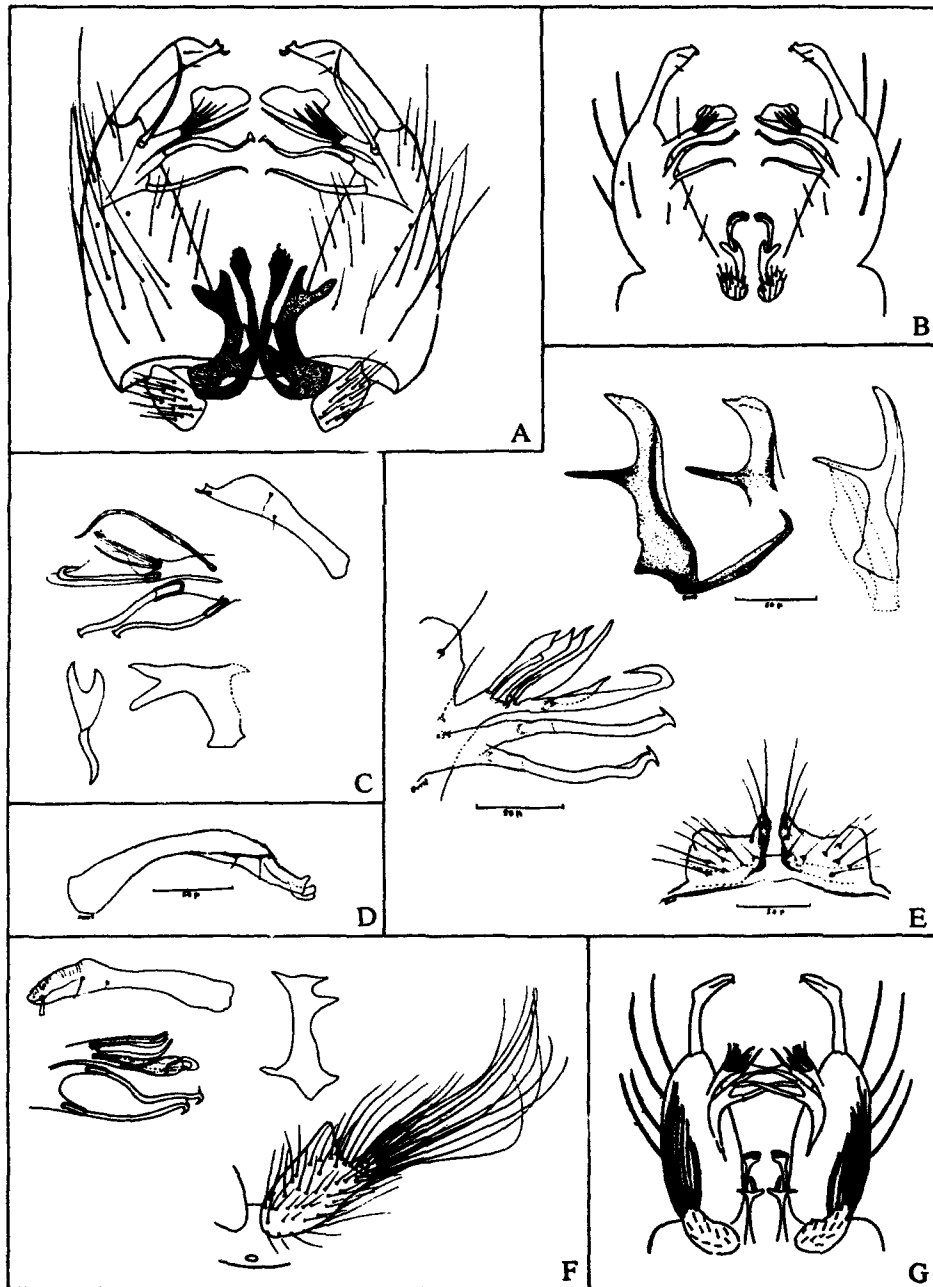


Fig. 3. *Culex albinensis*: A, Evans 1924 (as *gordoni*); B, Dyar 1928; C, Rozeboom and Komp 1950; D, Lane 1953; E, Cova Garcia, Sutil and Rausseo 1966a; F, Forattini and Sallum 1987a.



**Fig. 4.** A-C, *Culex alcocki*: A, Bonne and Bonne-Wepster 1925; B, Dvar 1928; C, Rozeboom and Komp 1950. D,E, *Culex aliciae*: D, Duret 1953; E, Duret 1954. F,G, *Culex alogistus*: F, Rozeboom and Komp 1950; G, Dvar 1928.

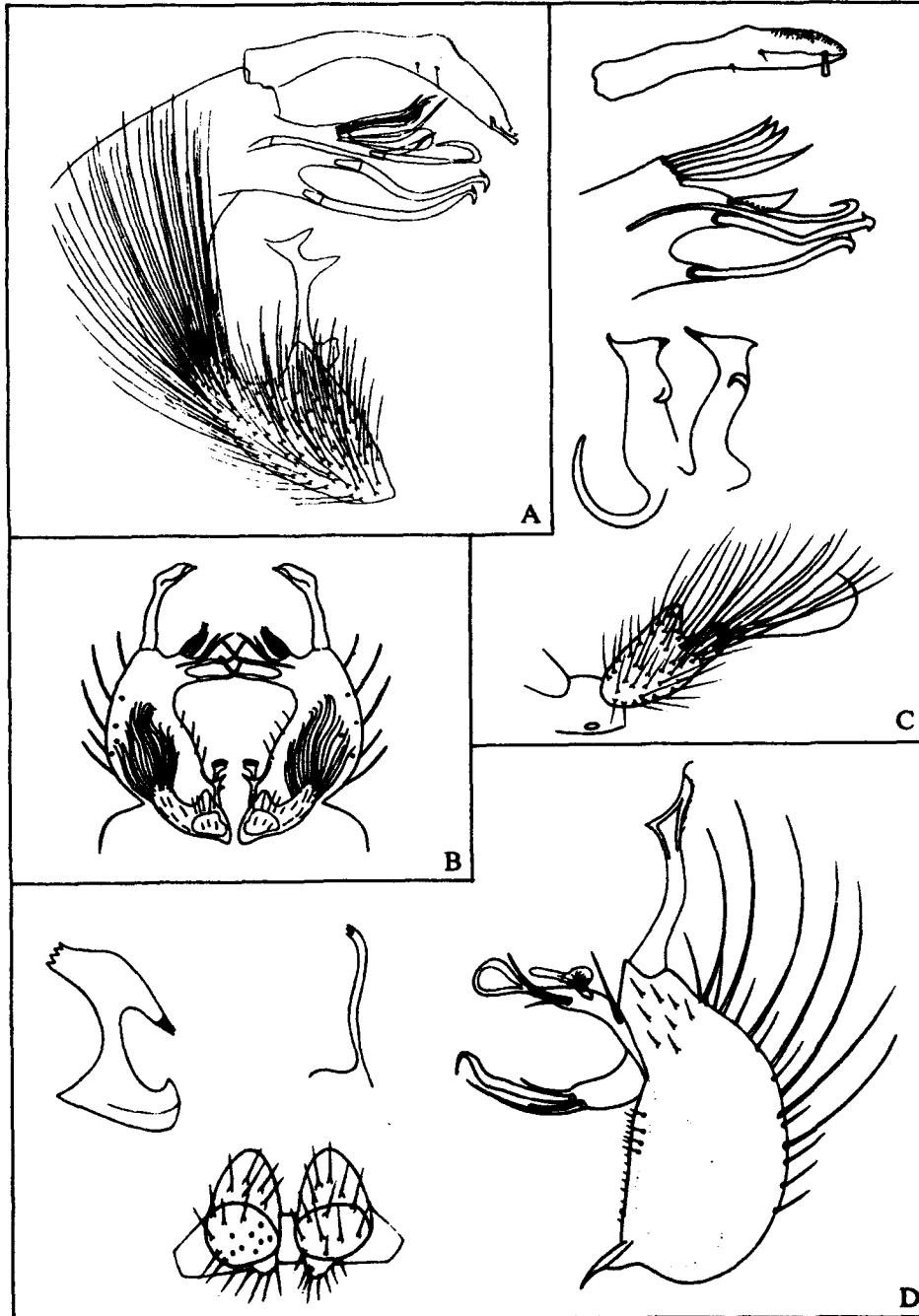
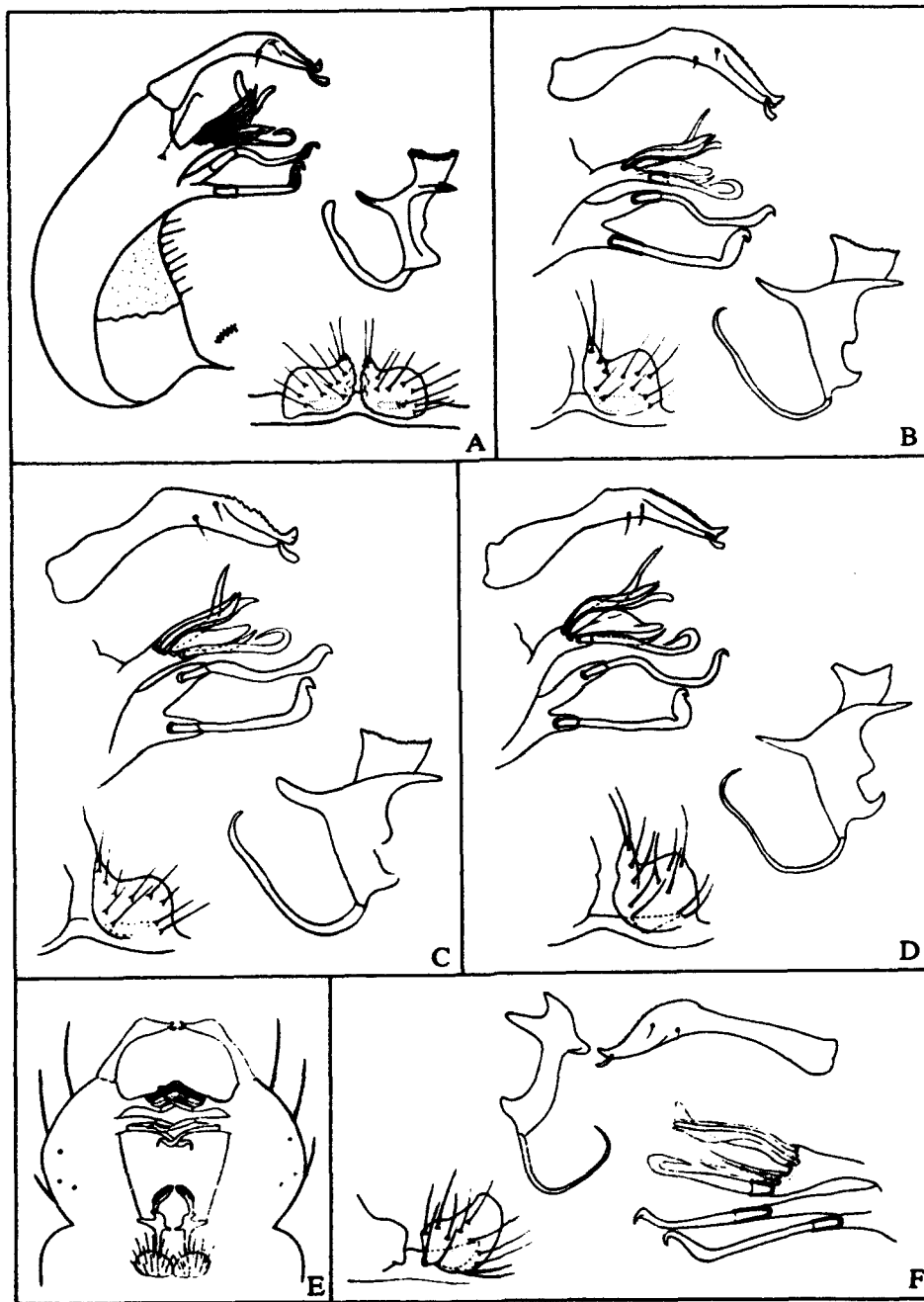


Fig. 5. A-C, *Culex alogistus*: A, Root 1927b (as *megapus*); B, Dyar 1928 (as *megapus*); C, Lane 1953. D, *Culex alvaresi*: Sutil Oramas, Pulido Florenzano and Amarista Meneses 1987.



**Fig. 6.** A-D, *Culex amitis*: A, Komp 1936a; B, Rozeboom and Komp 1950; C, Lane 1953; D, Cova Garcia, Sutil and Rausseo 1966a. E,F, *Culex andricus*: E, Dyar 1928; F, Rozeboom and Komp 1950.

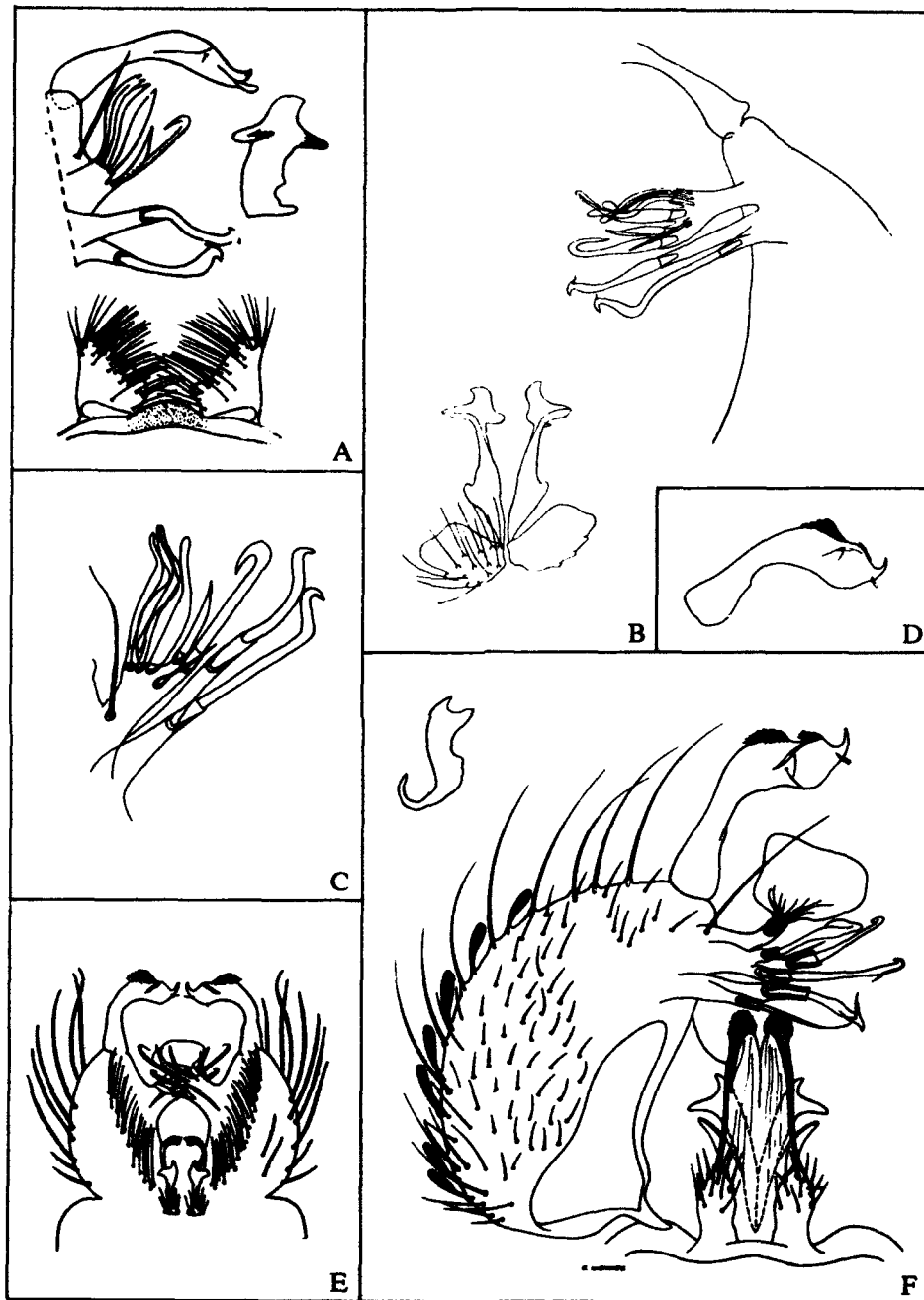
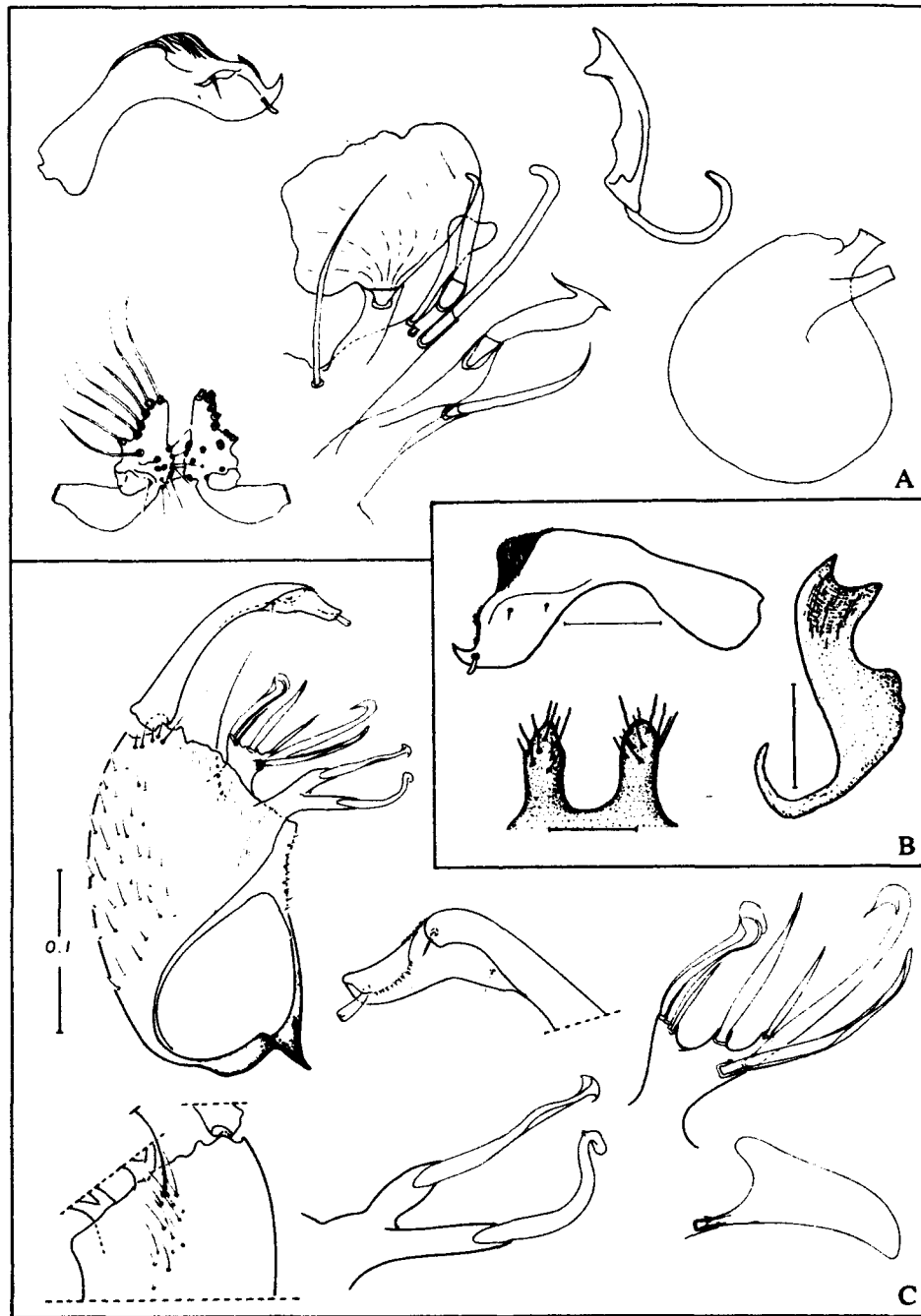


Fig. 7. A-C, *Culex andricus*: A, Lane 1953; B, Root 1927b; C, Sirivanakarn 1983. D-F, *Culex anips*: D, Rozeboom and Komp 1950; E, Dyar 1928; F, Carpenter and LaCasse 1955.



**Fig. 8.** A,B, *Culex anips*: A, Sirivanakarn 1983; B, Wirth 1945. C, *Culex anoplicitus*: Forattini and Sallum 1989a.

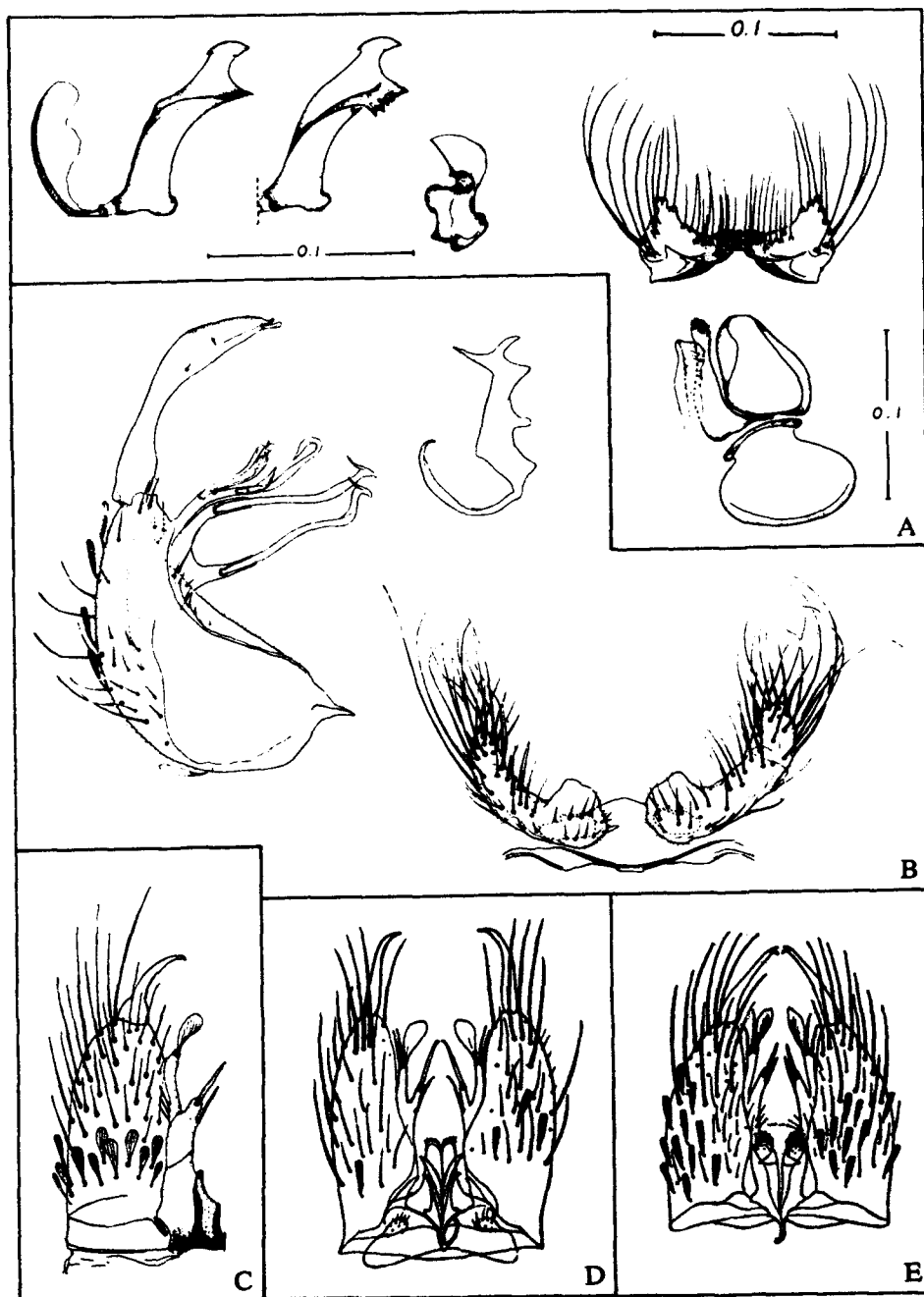


Fig. 9. A, *Culex anoplicitus*: Forattini and Sallum 1989a. B, *Culex arboricola*: Galindo and Mendez 1961. C-E, *Culex atratus*: C, Dyar 1905a; D, Howard, Dyar and Knab 1913 (as *falsificator*); E, Howard, Dyar and Knab 1913.

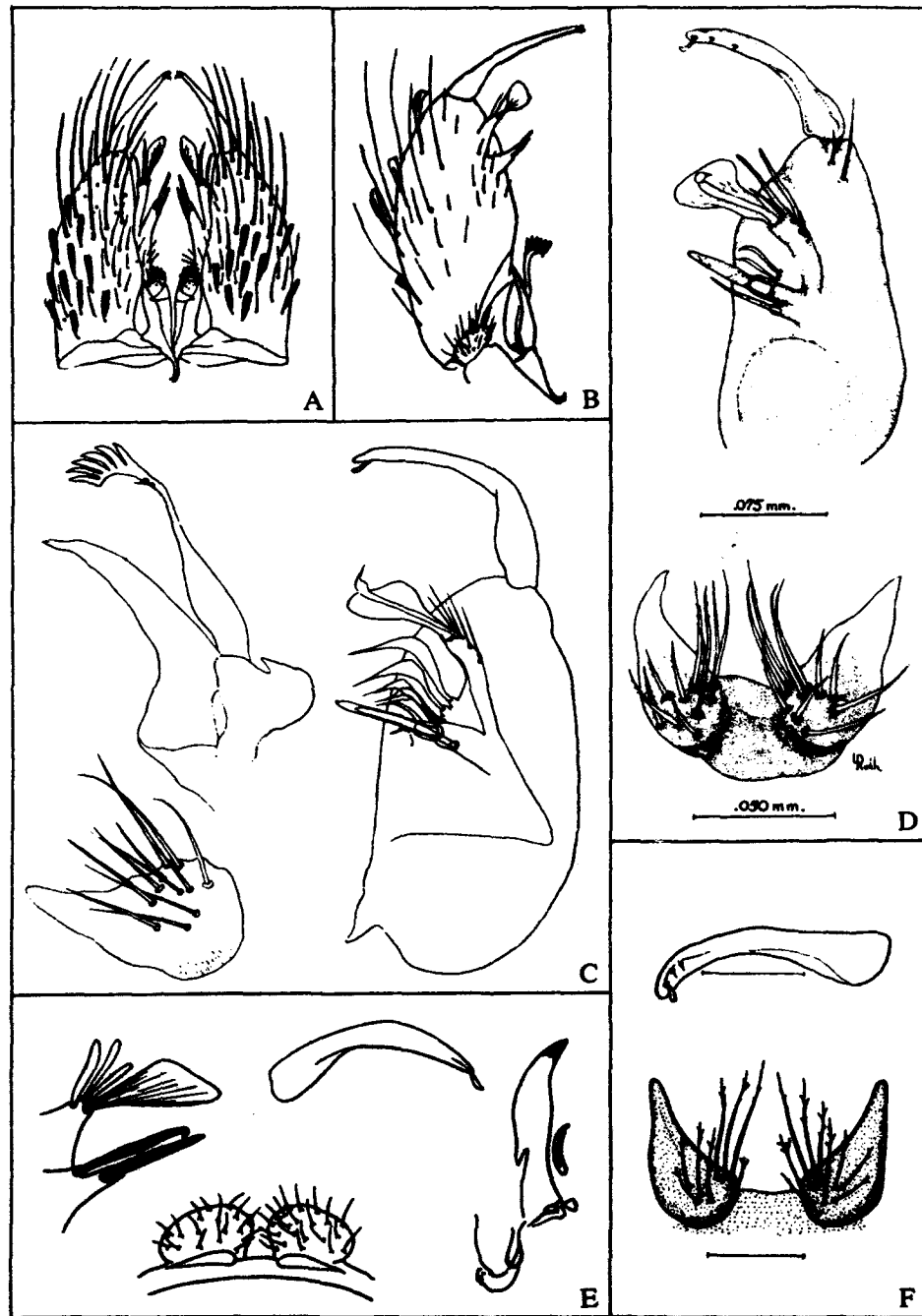
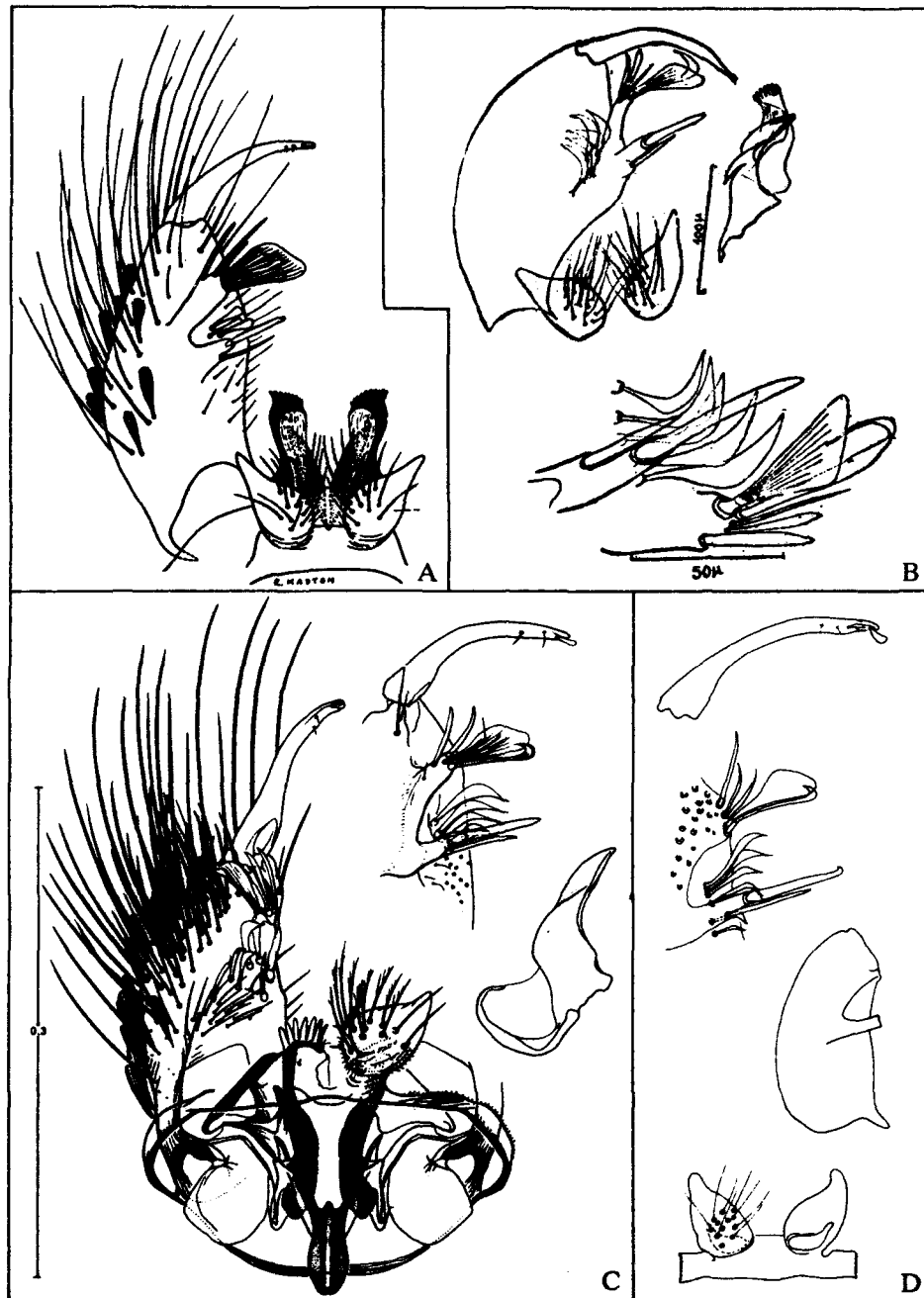


Fig. 10. *Culex atratus*: A, Dyar 1928; B, Dyar 1923d; C, Senevet 1938 (as *adivieri*); D, Roth and Young 1944; E, Lane 1953; F, Wirth 1945.





**Fig. 11.** *Culex atratus*: A, Carpenter, Middlekauff and Chamberlain 1946; B, Floch and Abonnenc 1945a (as *adivieri*); C, Belkin, Heinemann and Page 1970; D, Sirivanakarn 1983.

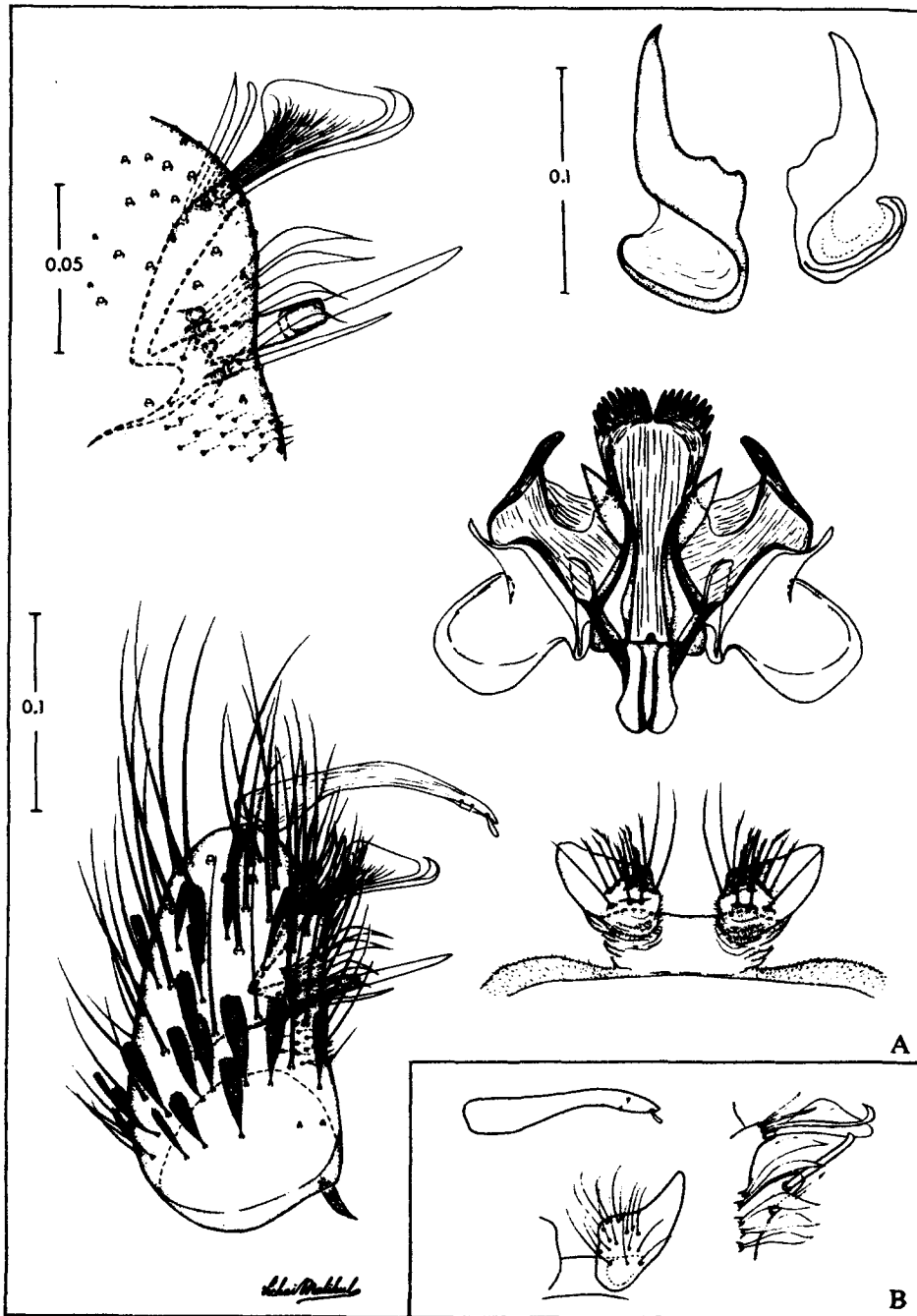


Fig. 12. *Culex atratus*: A, Sirivanakarn 1983; B, Rozeboom and Komp 1950.

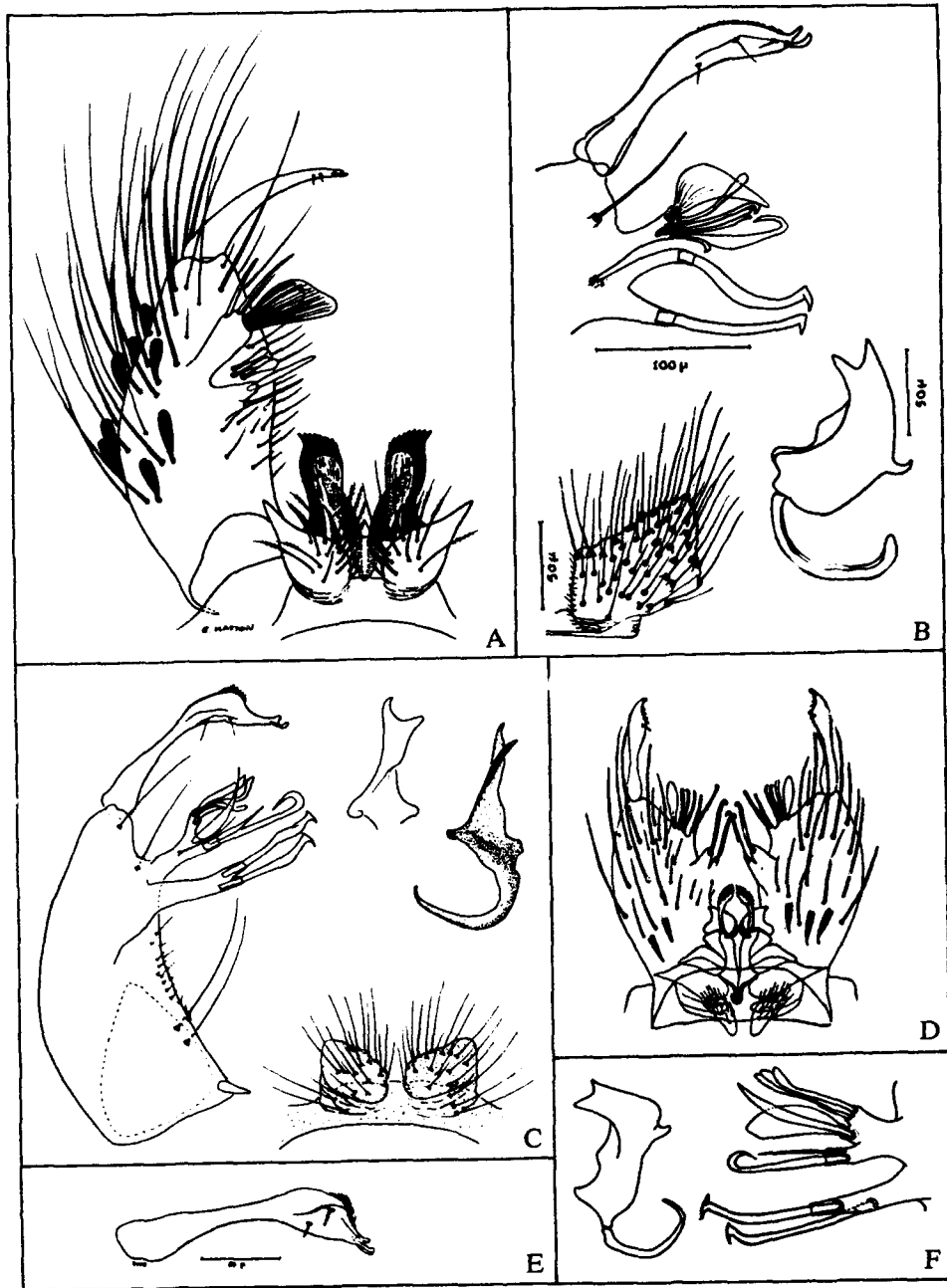


Fig. 13. A, *Culex atratus*: A, Carpenter and LaCasse 1955. B, *Culex aureonotatus*: Duret and Barreto 1956. C, *Culex bahiensis*: Duret 1969b. D-F, *Culex bastagarius*: D, Howard, Dyar and Knab 1913; E, Duret 1953; F, Rozeboom and Komp 1950 (as *thomasi*).

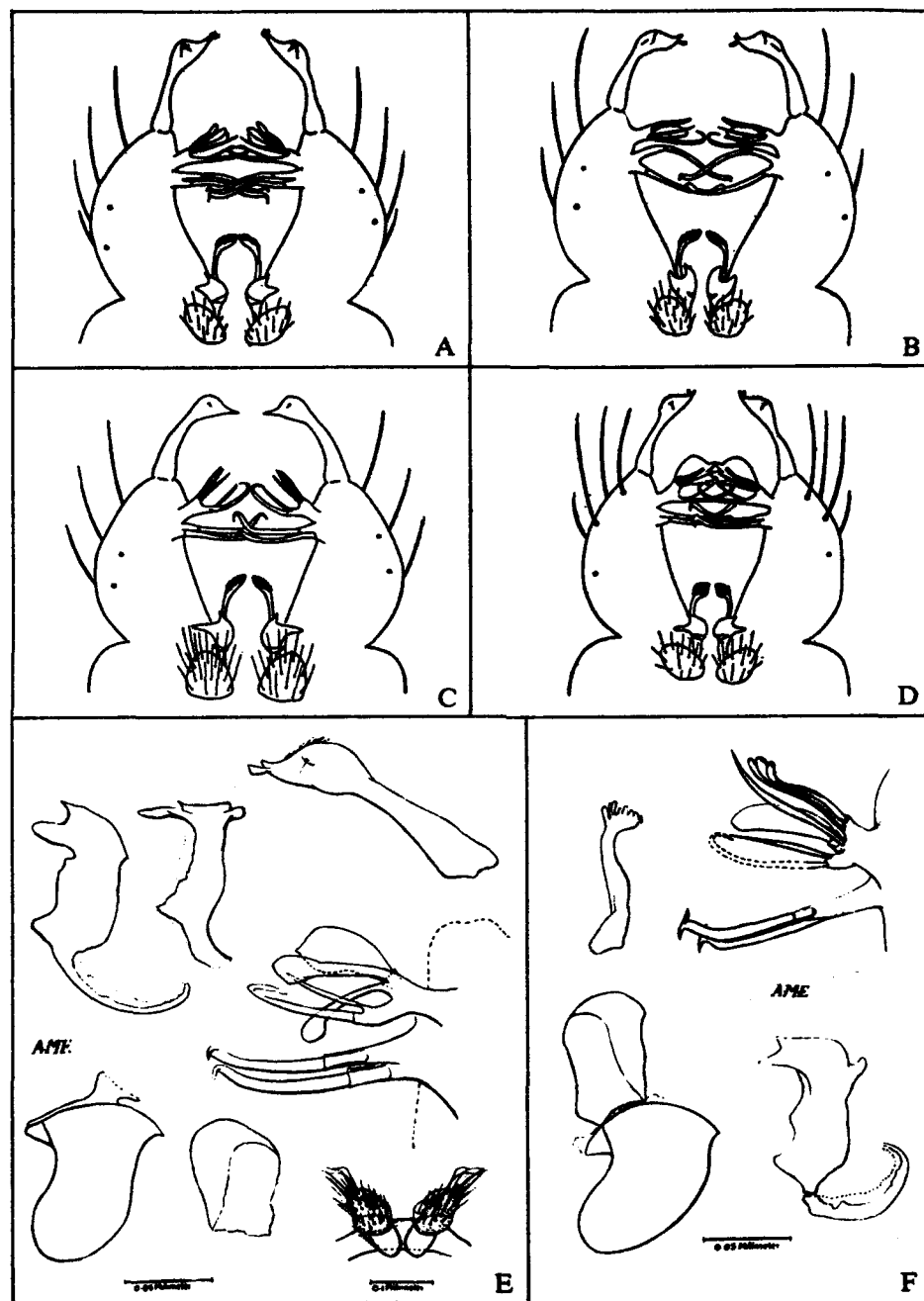


Fig. 14. *Culex bastagarius*: A, Dyar 1928 (as *xivylis*); B, Dyar 1928 (as *vapularis*); C, Dyar 1928; D, Dyar 1928 (as *innominatus*); E, Evans 1924 (as *innominatus*); F, Evans 1924 (as *thomasi*).

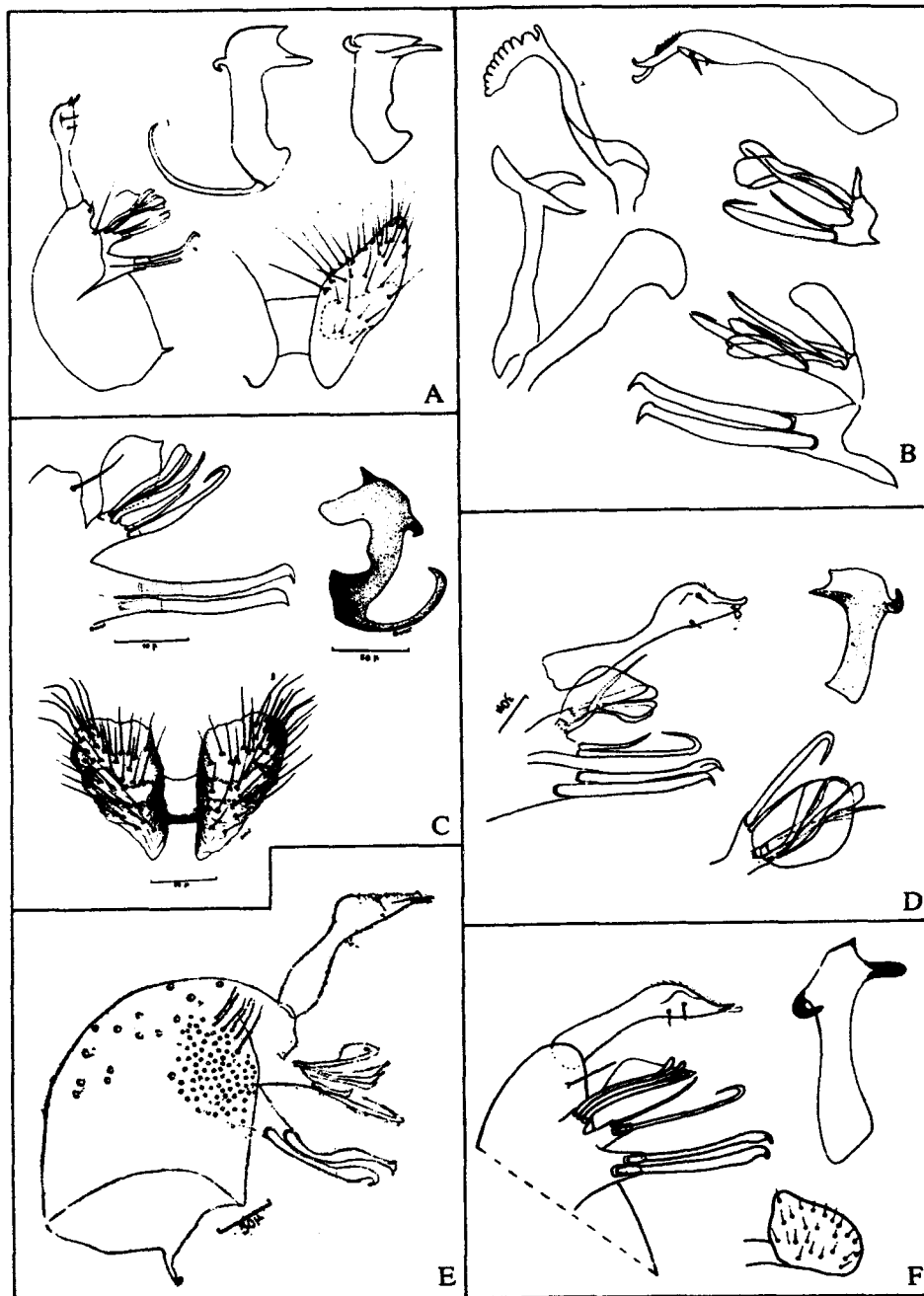


Fig. 15. *Culex bastagarius*: A, Rozeboom and Komp 1950; B, Senevet 1937 (as *innominatus*); C, Duret 1954; D, Senevet and Abonnenc 1939 (as *innominatus*); E, Floch and Abonnenc 1945a (as *thomasi*); F, Lane 1953.

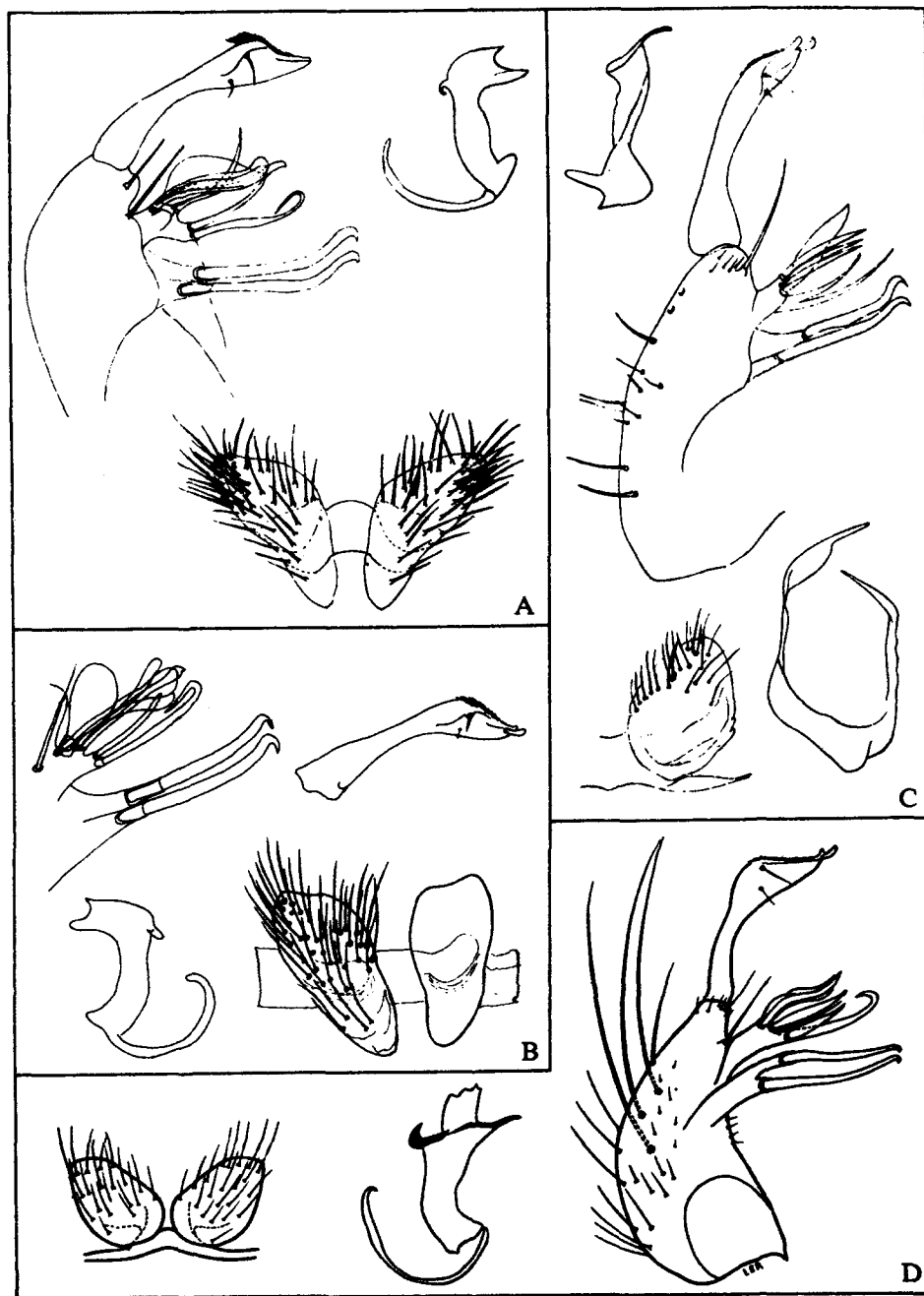


Fig. 16. A-C, *Culex bastagarius*: A, Cova Garcia, Sutil and Rausseo 1966a; B, Sirivanakarn 1983; C, Cova Garcia, Sutil and Rausseo 1966a (as *thomasi*). D, *Culex batesi*: Rozeboom and Komp 1948.

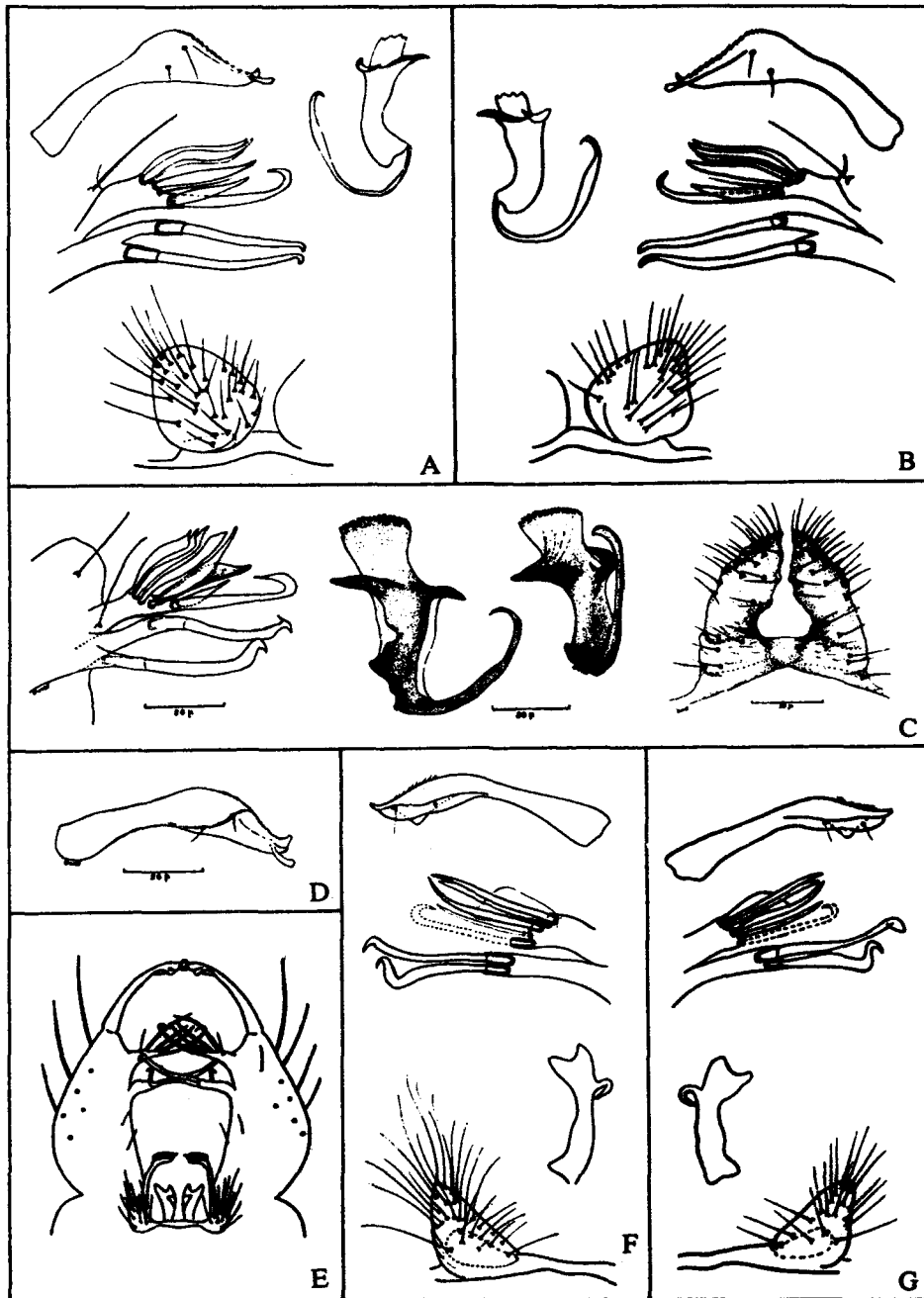


Fig. 17. A,B, *Culex batesi*: A, Rozeboom and Komp 1950; B, Lane 1953. C,D, *Culex bejaranoi*: C, Duret 1954; D, Duret 1953. E-G, *Culex bequaerti*: E, Dyar 1928; F, Rozeboom and Komp 1950; G, Lane 1953.

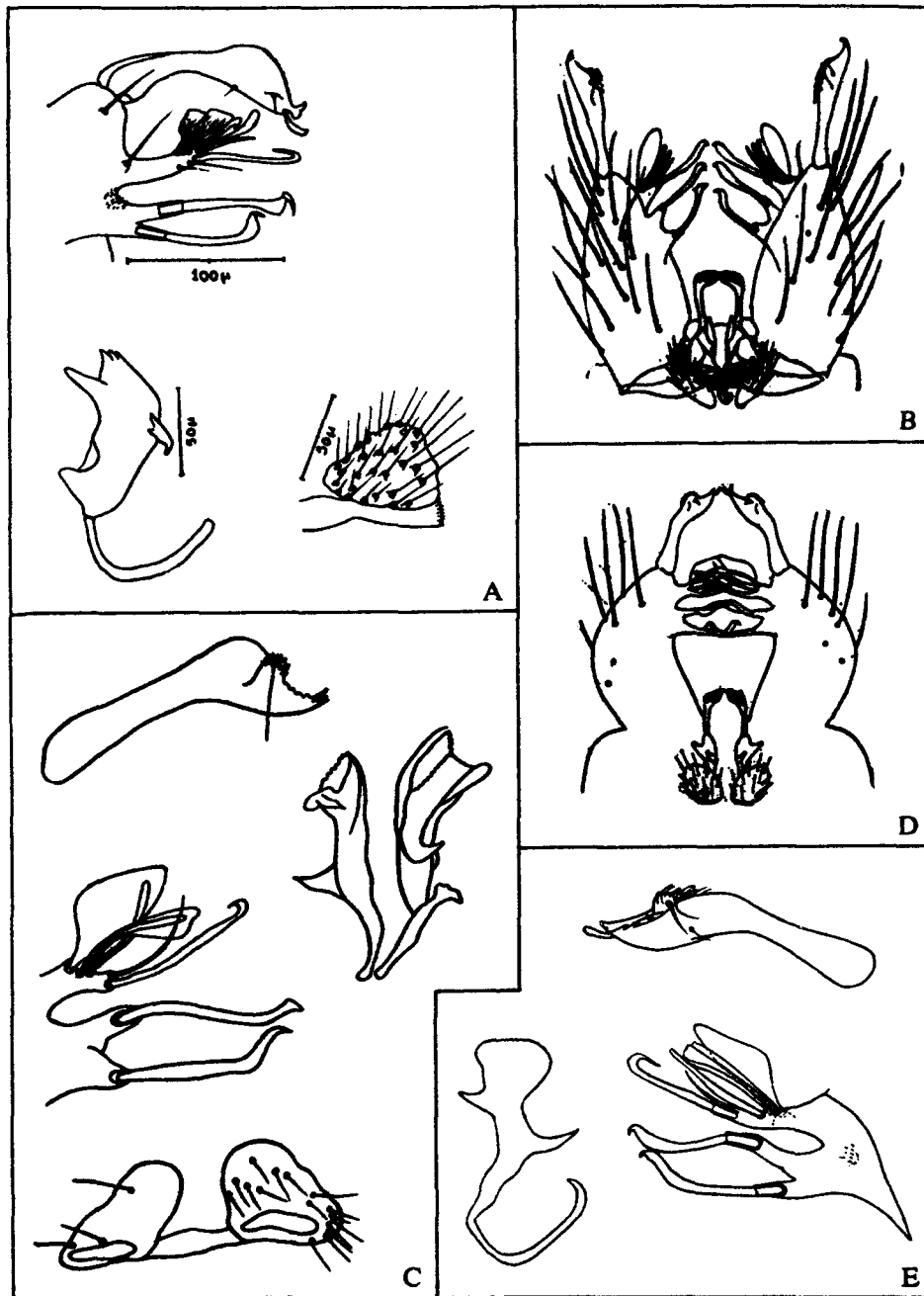


Fig. 18. A, *Culex bifoliolatus*: Duret and Barreto 1956. B-E, *Culex carcinophilus*: B, Howard, Dyar and Knab 1913; C, Lane 1953; D, Dyar 1928; E, Rozeboom and Komp 1950.



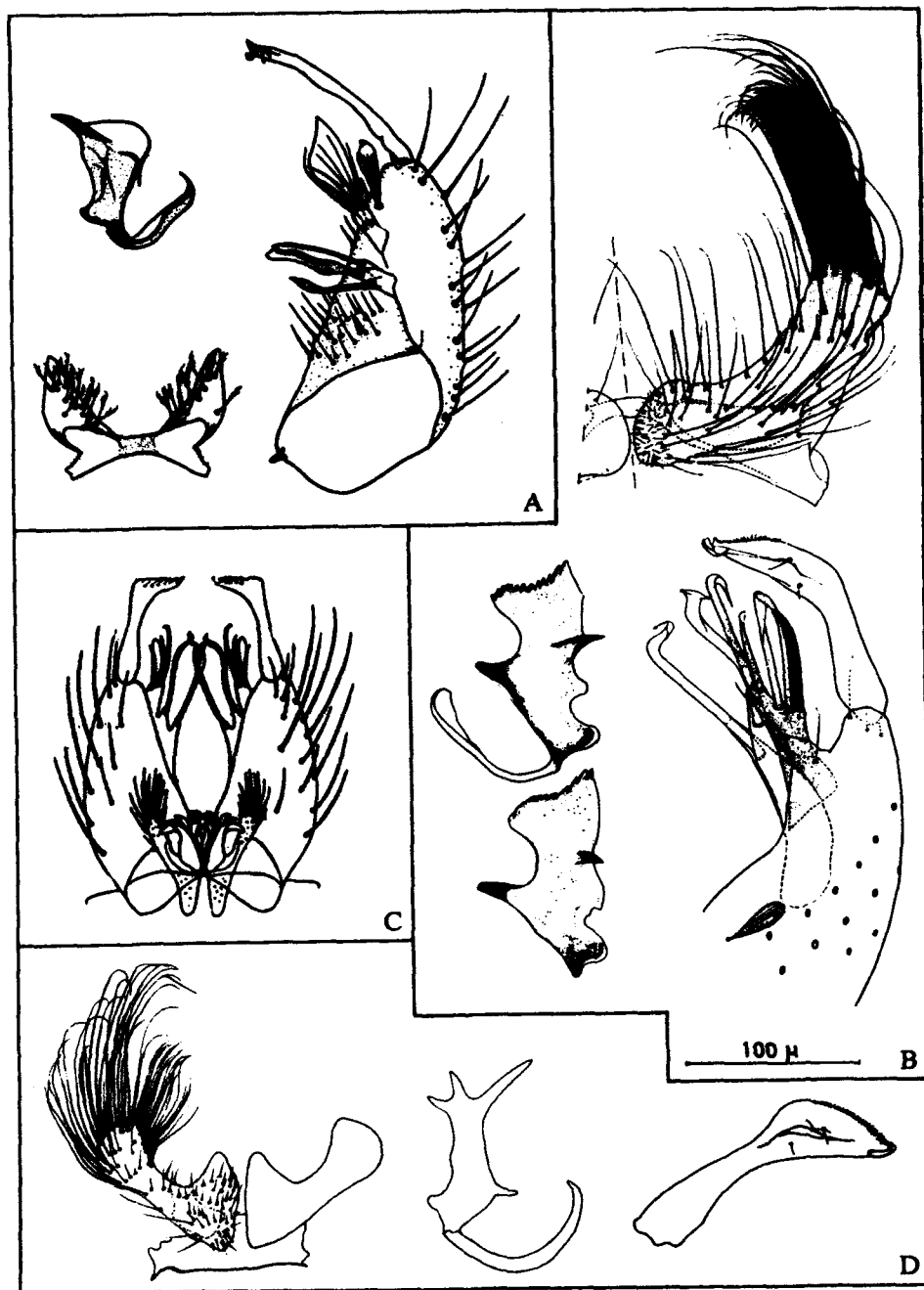


Fig. 19. A, *Culex caribbeanus*: Galindo and Blanton 1954. B, *Culex caudatus*: Clastrier 1970a. C, D, *Culex candelli*: C, Howard, Dyar and Knab 1913; D, Sirivanakarn 1983.

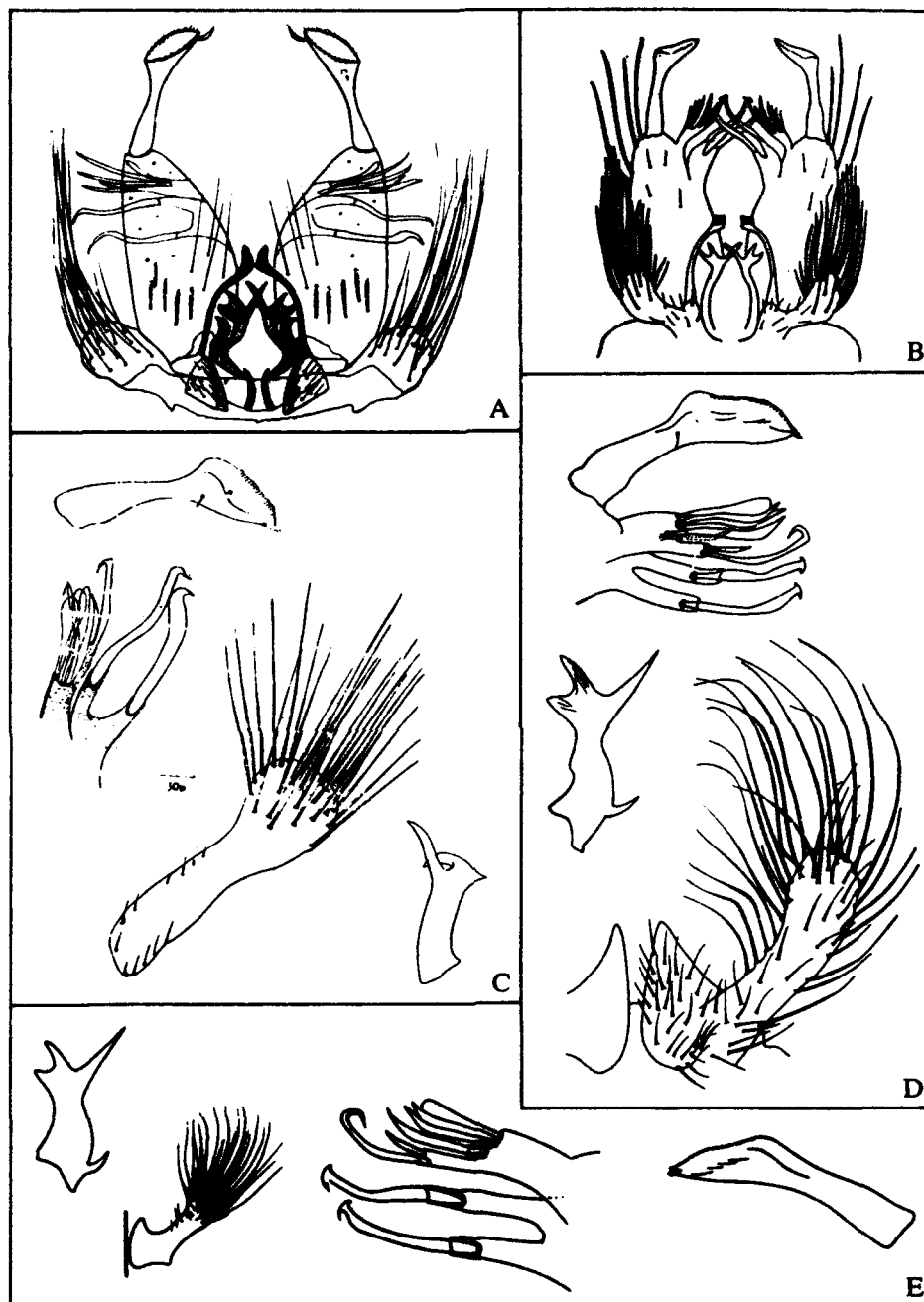


Fig. 20. *Culex caudelli*: A, Bonne and Bonne-Wepster 1925 (as *multispinosus*); B, Dyar 1928; C, Senevet and Abonnenc 1939; D, Cova Garcia, Sutil and Rausseo 1966a; E, Forattini 1965.

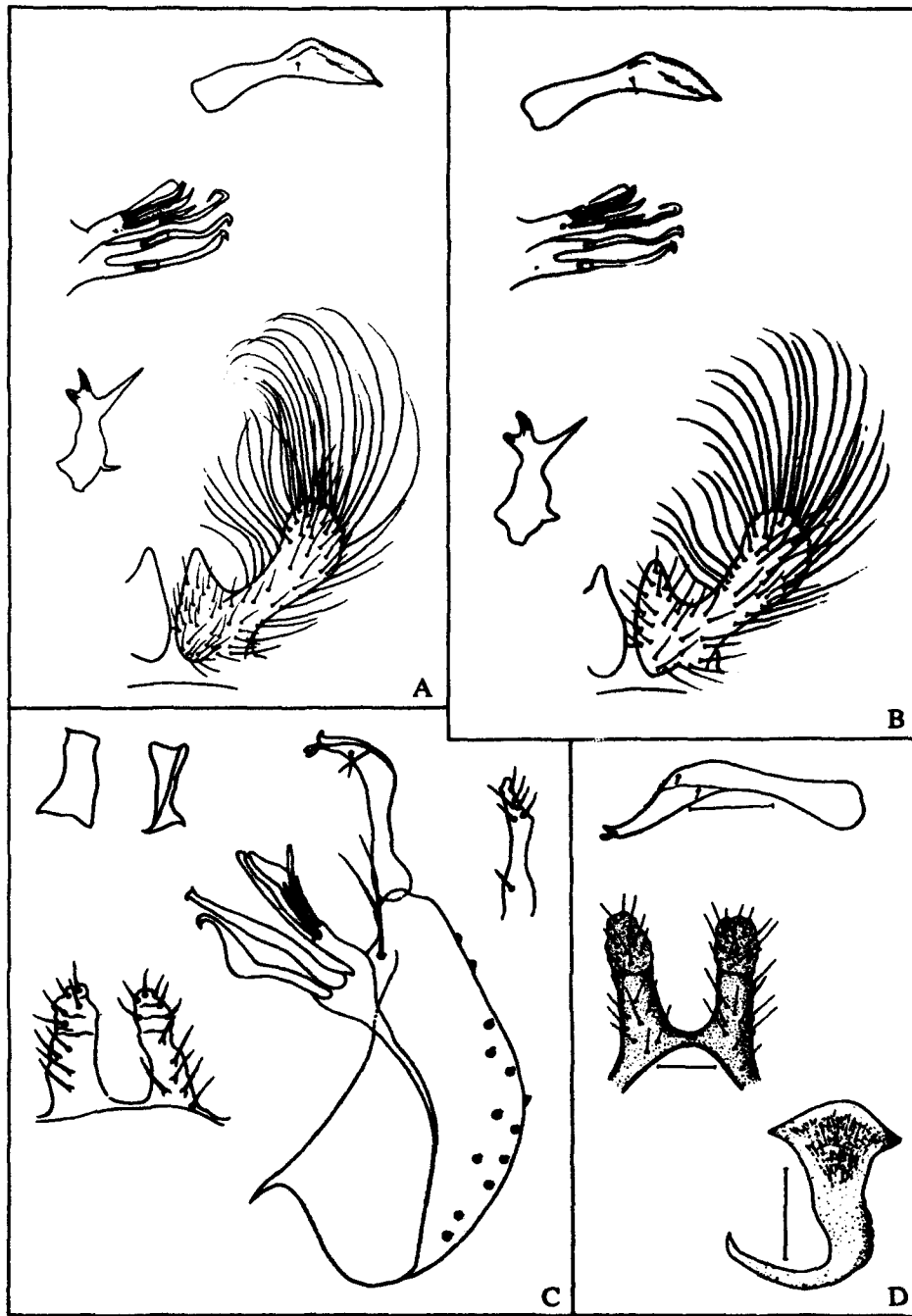


Fig. 21. A,B, *Culex caudelli*: A, Rozeboom and Komp 1950; B, Lane 1953. C,D, *Culex cedecei*: C, Stone and Hair 1968; D, Wirth 1945 (as *opisthopus*).

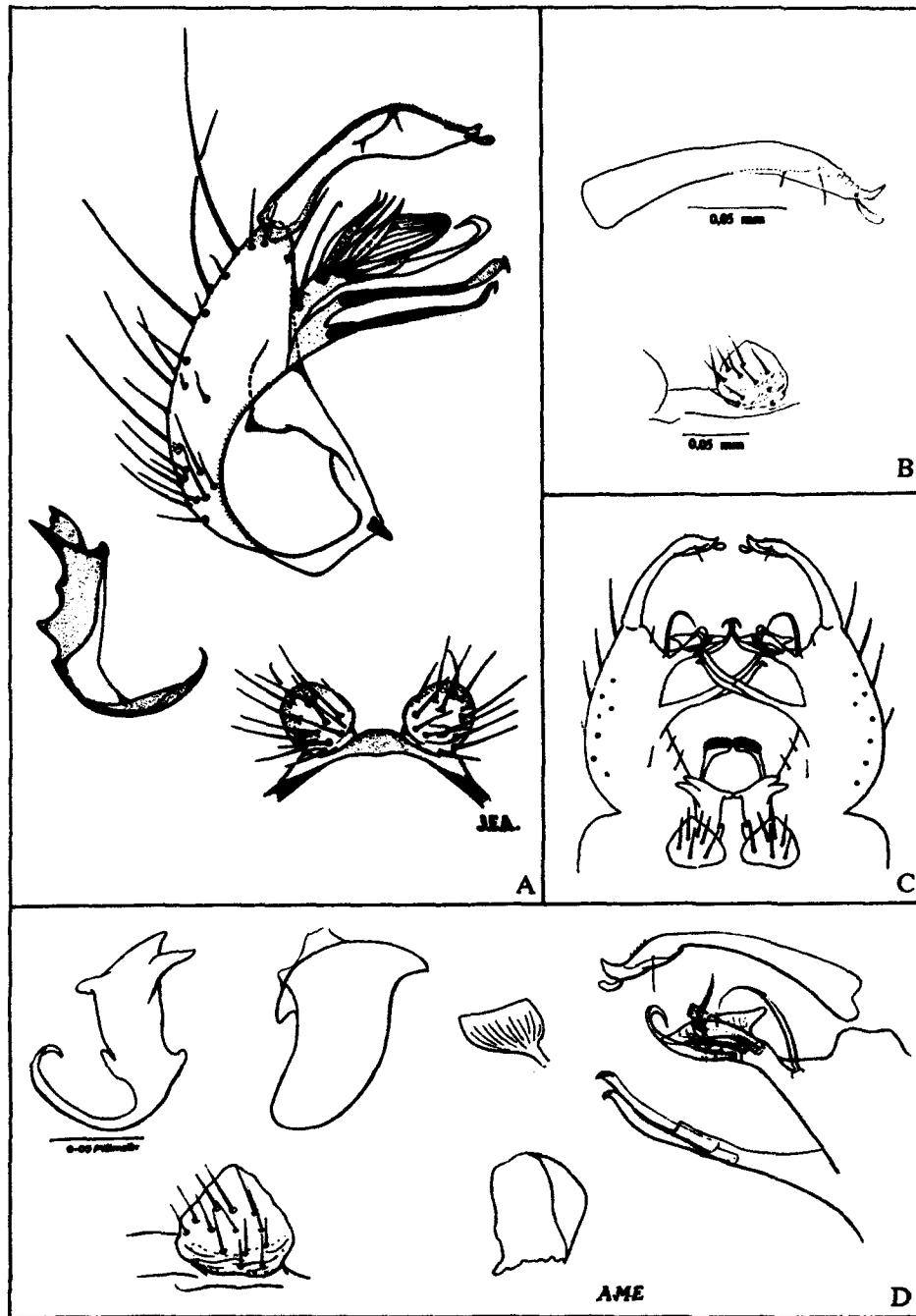


Fig. 22. A, *Culex changuinolae*: Galindo and Blanton 1954. B-D, *Culex clarki*: B, Casal 1963; C, Dyar 1928; D, Evans 1924.

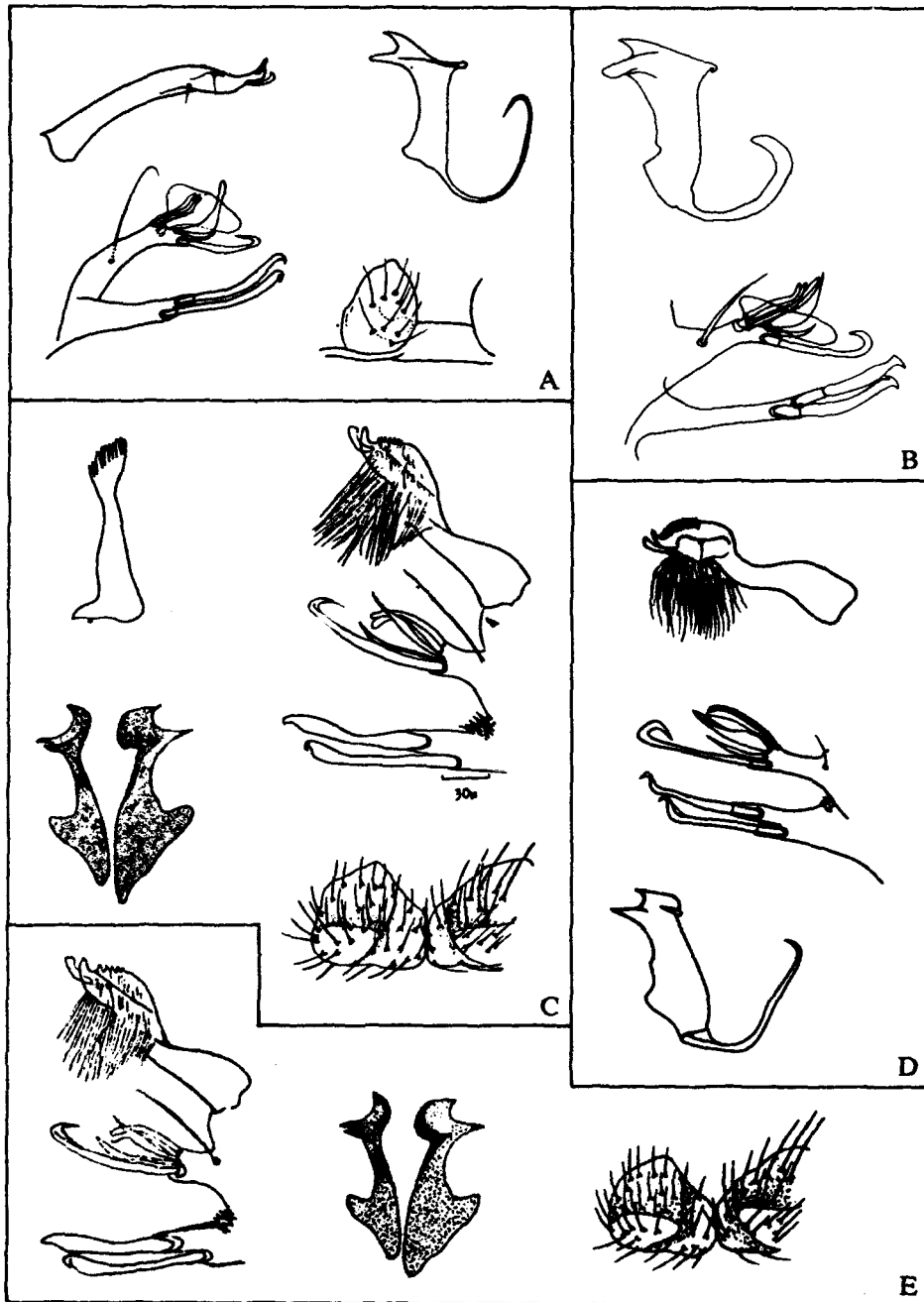


Fig. 23. A,B, *Culex clarki*: A, Rozeboom and Komp 1950 (as *nigrescens*); B, Sirivanakarn 1983. C-E, *Culex comatus*: C, Senevet and Abonnenc 1939; D, Rozeboom and Komp 1950; E, Lane 1953.

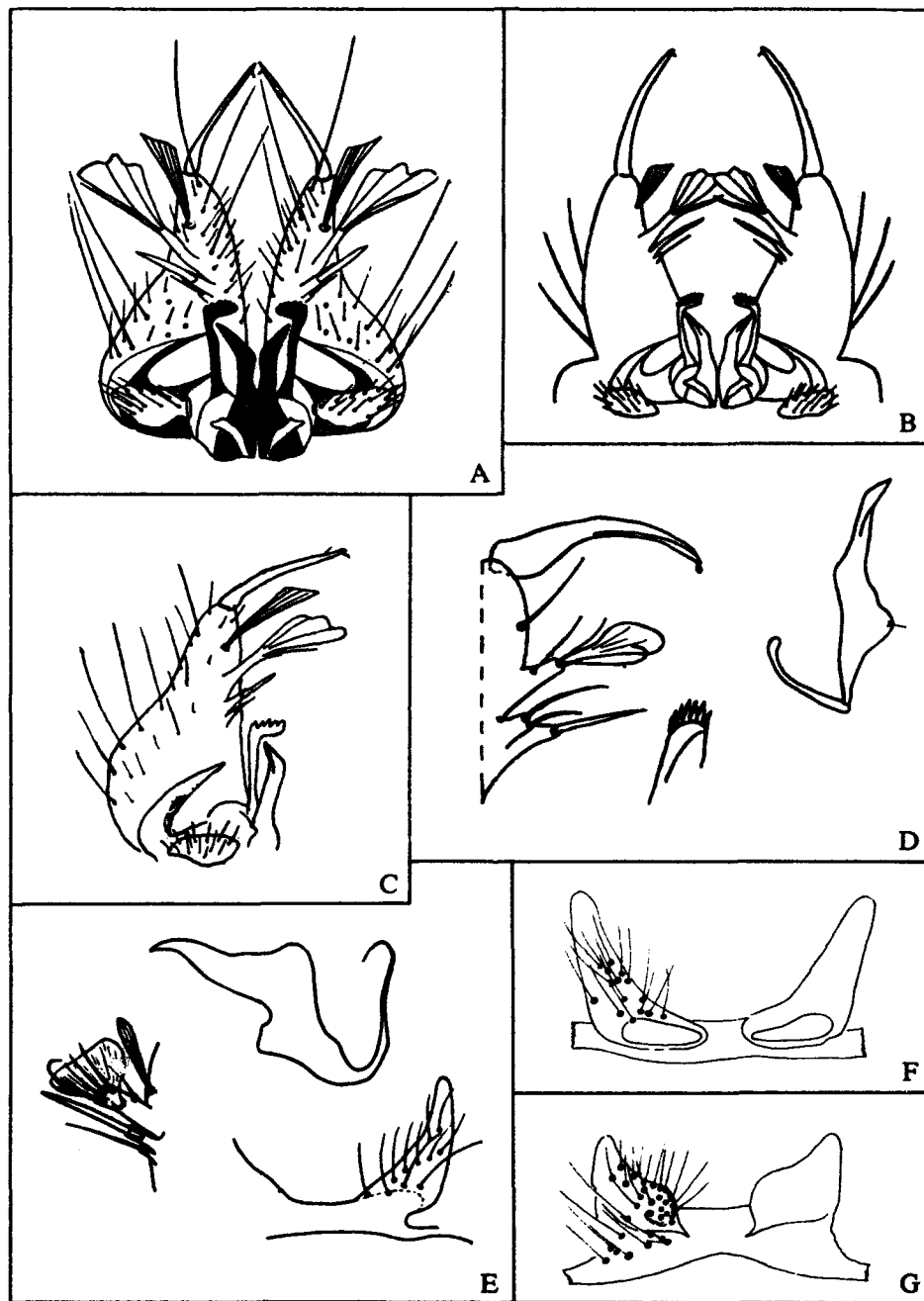
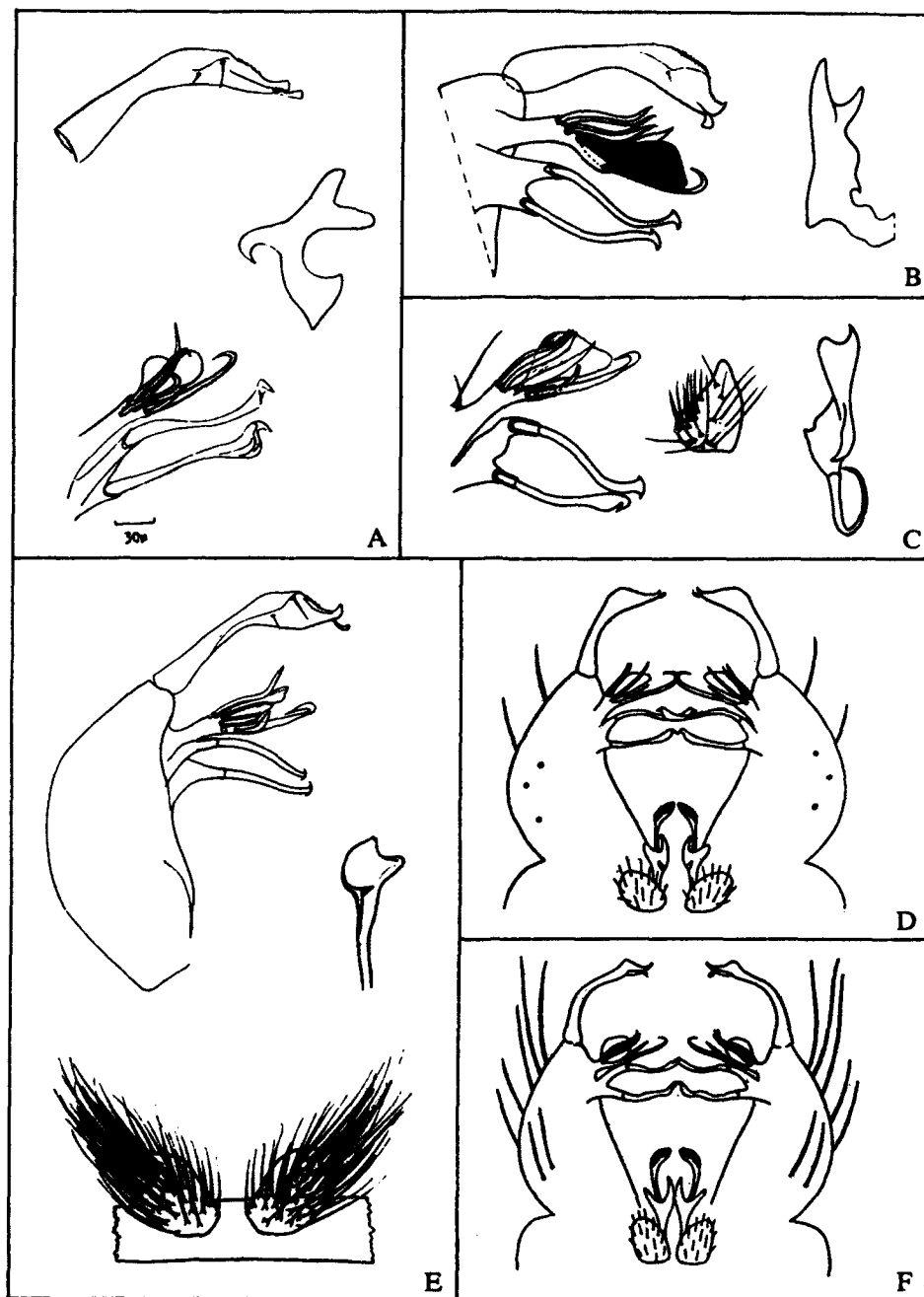


Fig. 24. A-F, *Culex commevynensis*: A, Bonne and Bonne-Wepster 1925; B, Dyar 1928; C, Dyar 1923d; D, Lane 1953; E, Rozeboom and Komp 1950; F, Sirivanakarn 1983. G, *Culex comminutor*: Sirivanakarn 1983.



**Fig. 25.** A-D, *Culex comminutor*: A, Senevet and Abonnenc 1939; B, Lane 1953; C, Rozeboom and Komp 1950; D, Dyar 1928. E, *Culex confundior*: E, Komp and Rozeboom 1951. F, *Culex conspirator*: Dyar 1928.

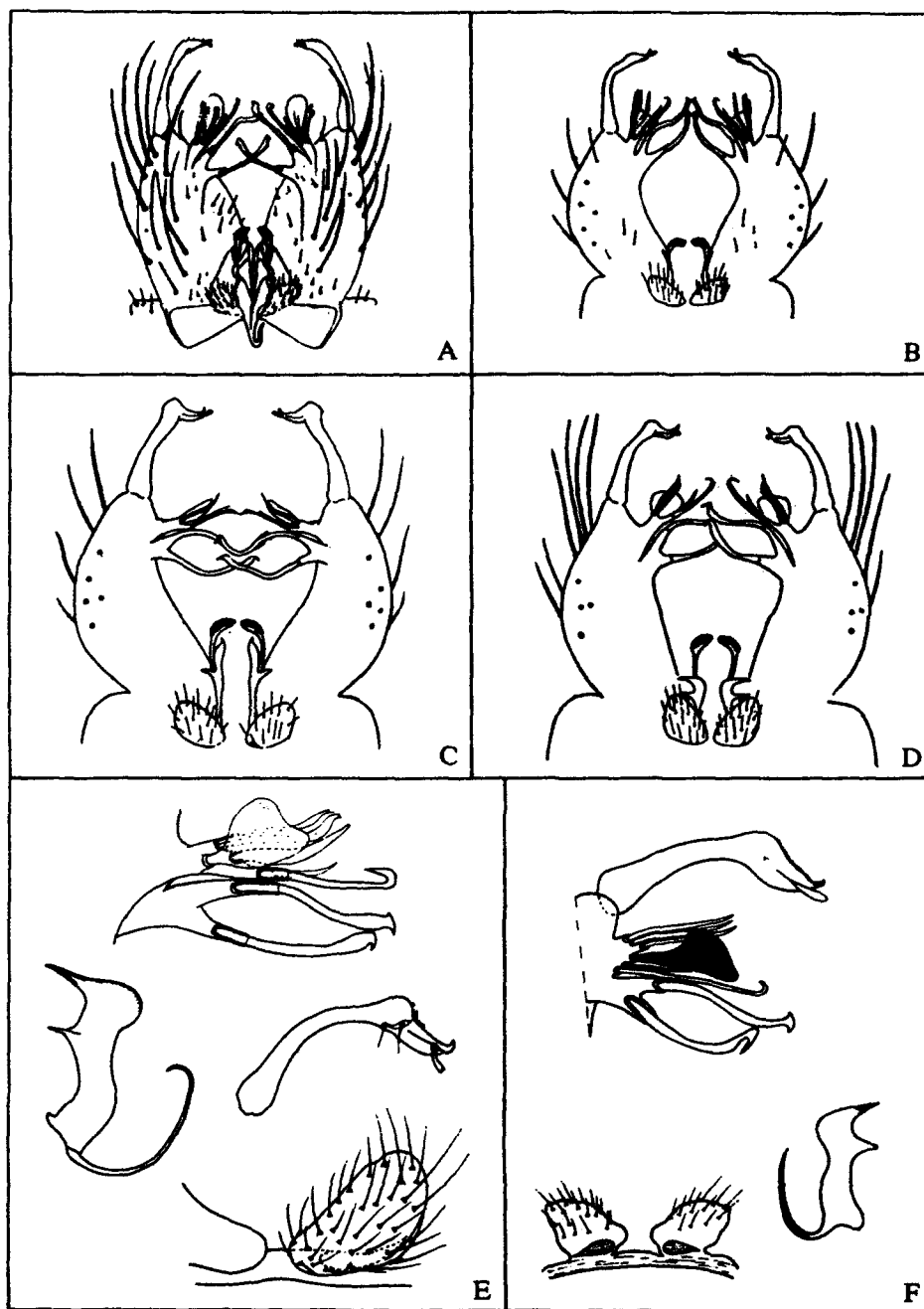


Fig. 26. *Culex conspirator*: A, Howard, Dyar and Knab 1913; B, Dyar 1928 (as *holoneus*); C, Dyar 1928 (as *macaronensis*); D, Dyar 1928 (as *fatuator*); E, Rozeboom and Komp 1950; F, Lane 1953.



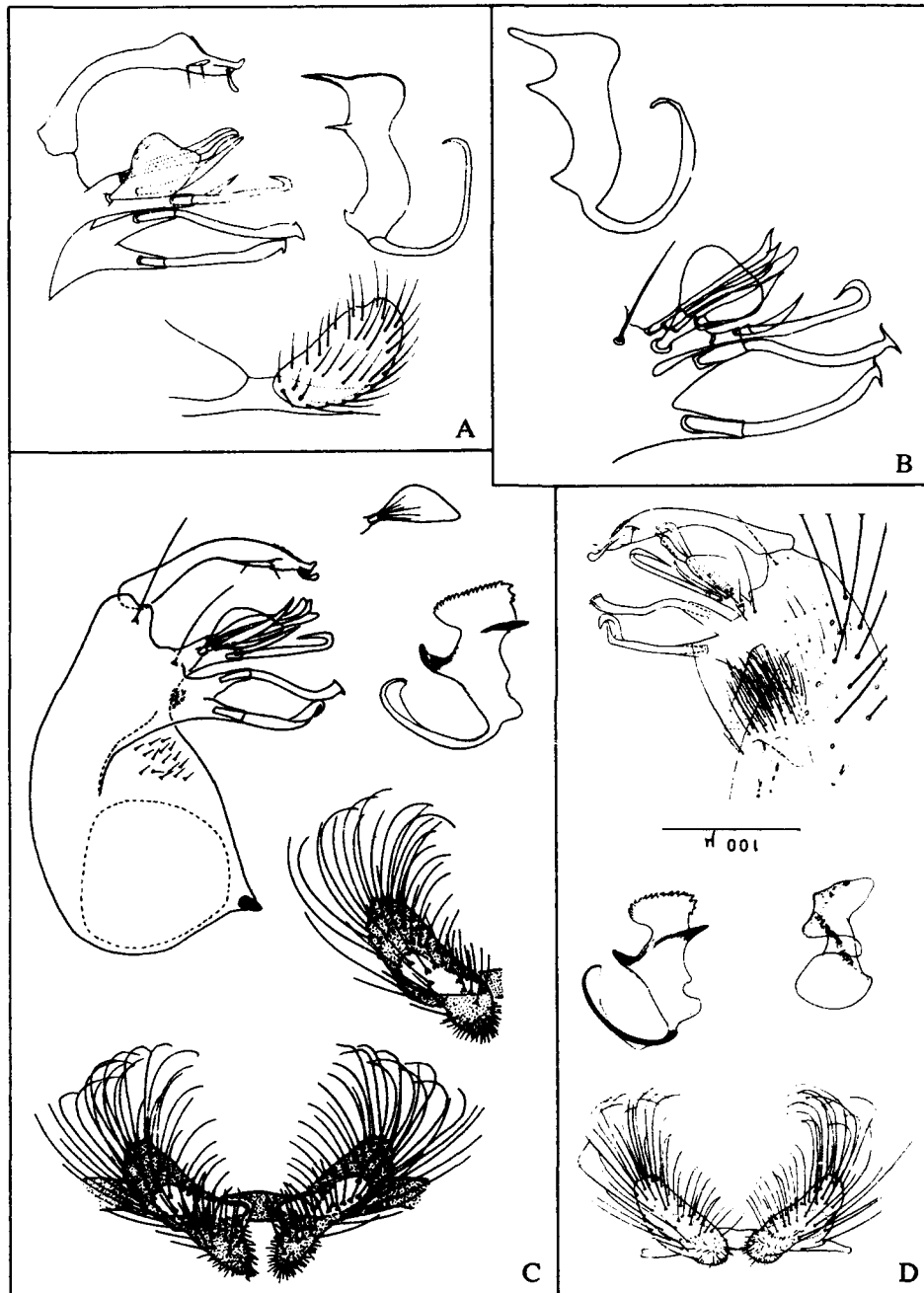
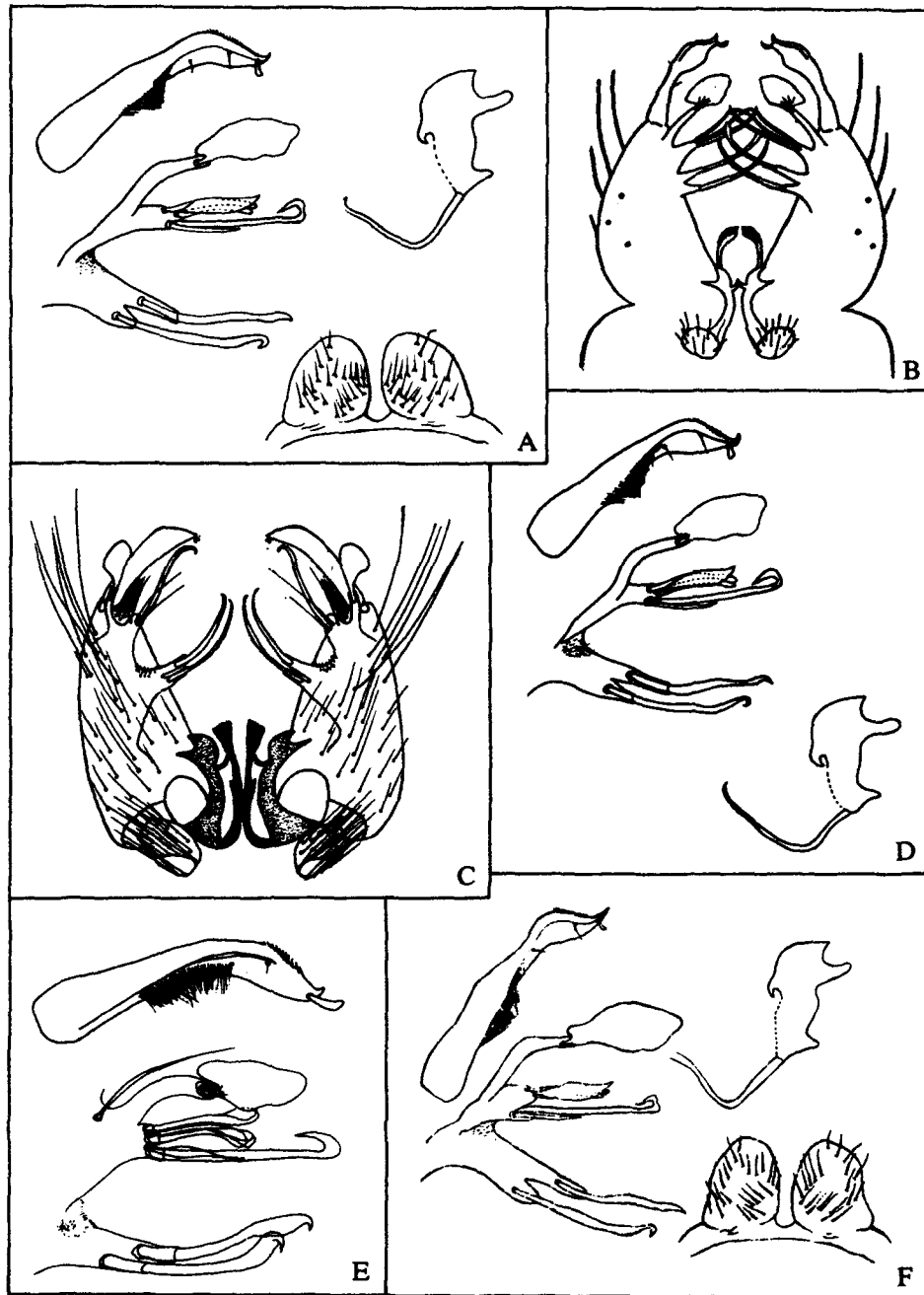


Fig. 27. A,B, *Culex conspirator*: A, Cova Garcia, Sutit and Rausseo 1966a; B, Sirivanakarn 1983. C,D, *Culex contei*. C, Duret 1968c; D, Clastrier 1970a (as *seneveti*).



**Fig. 28.** *Culex coppenamensis*: A, Lane 1953; B, Dyar 1928; C, Bonne and Bonne-Wepster 1925; D, Rozeboom and Komp 1950; E, Sirivanakarn 1983; F, Cova Garcia, Sutil and Rausseo 1966a.

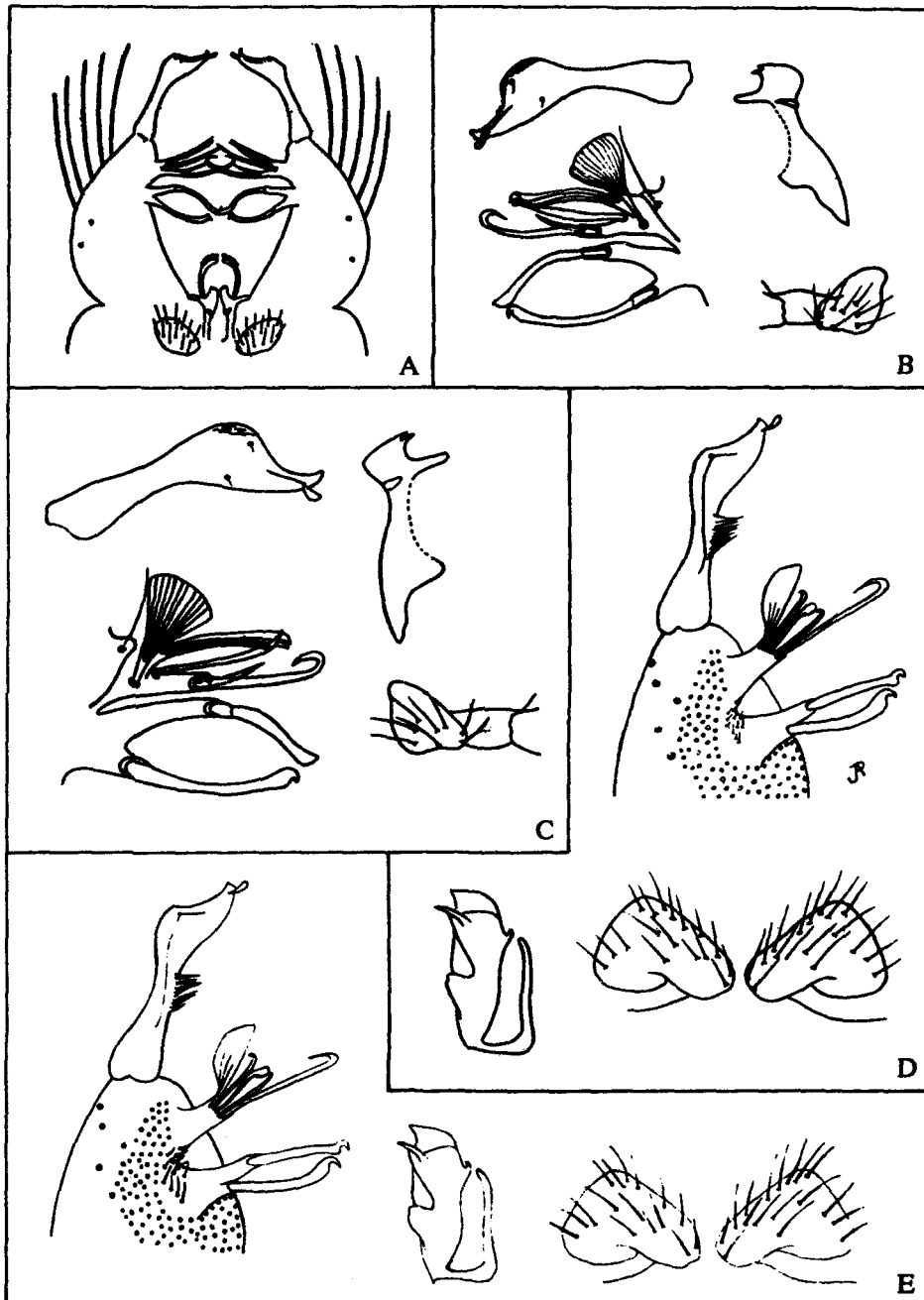


Fig. 29. A-C, *Culex corentynensis*: A, Dyar 1928; B, Rozeboom and Komp 1950; C, Lane 1953. D,E, *Culex creole*: D, Anduze 1949b; E, Cova Garcia, Sutil and Rausseo 1966a.

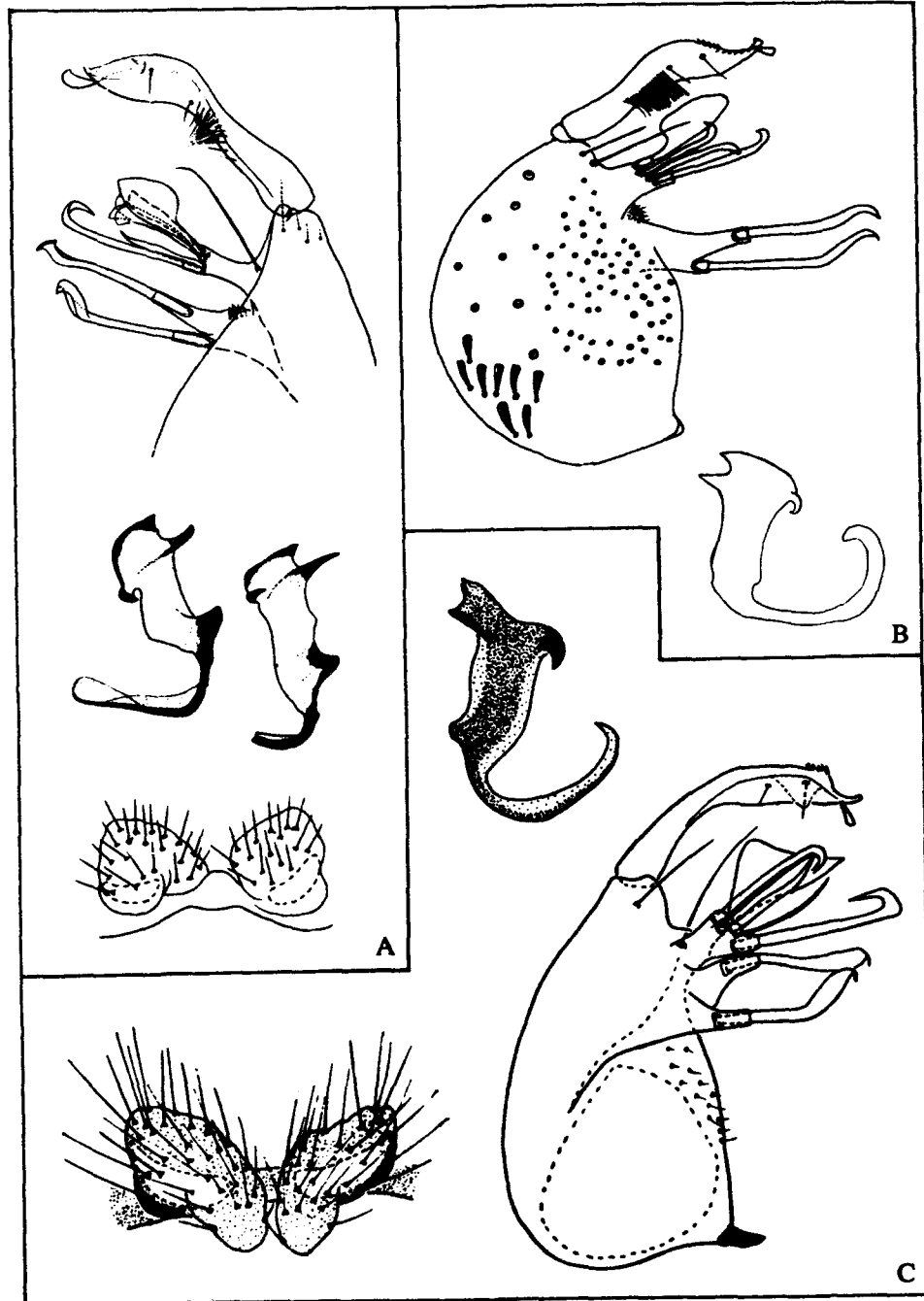


Fig. 30. A,B, *Culex creole*: A, Clastrier 1968; B, Sirivanakarn 1983. C, *Culex cristovaoi*: Duret 1968a.

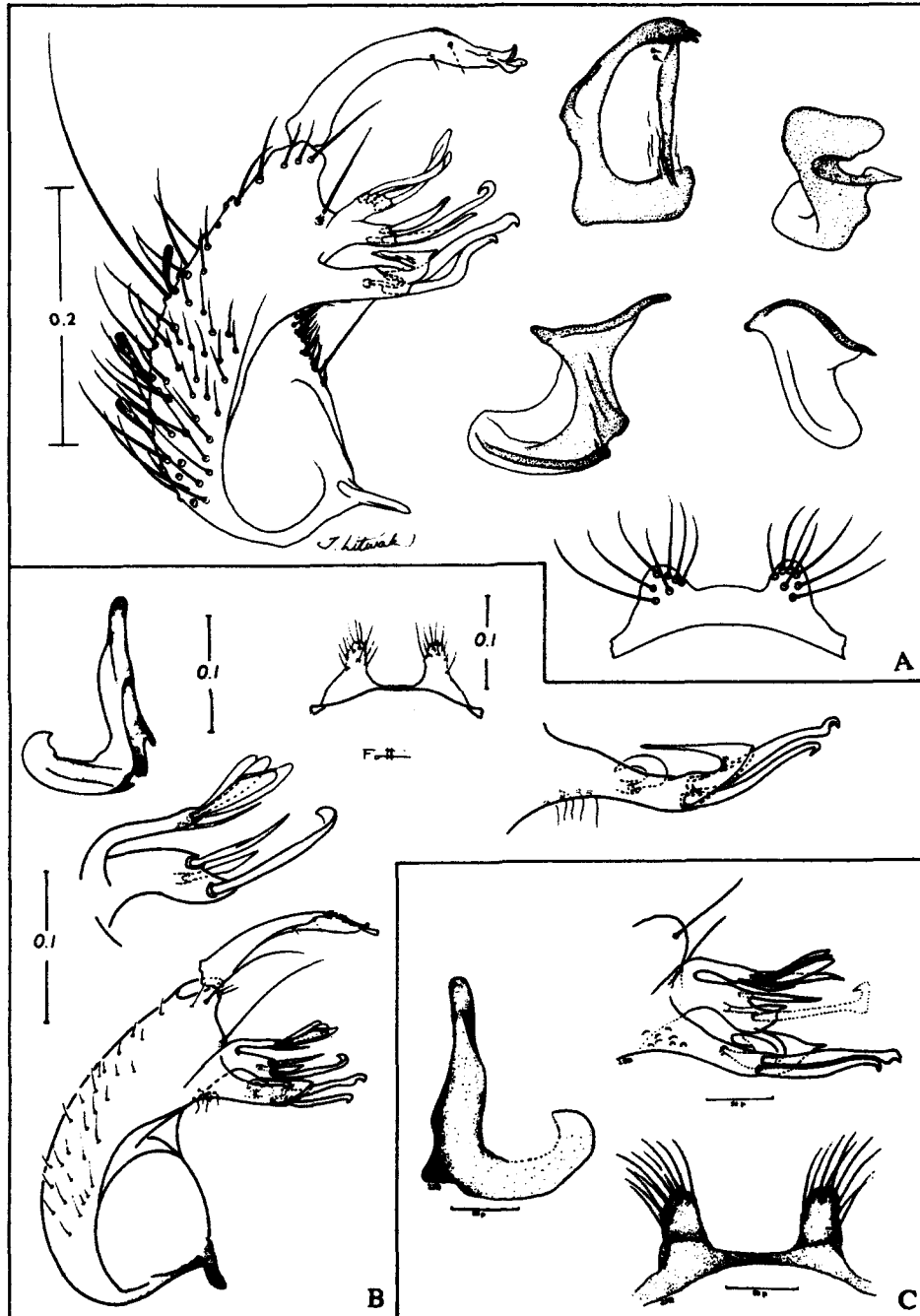


Fig. 31. A, *Culex crybda*: original drawing. B, C, *Culex delponteii*: B, Forattini and Sallum 1989b; C, Duret 1969a.

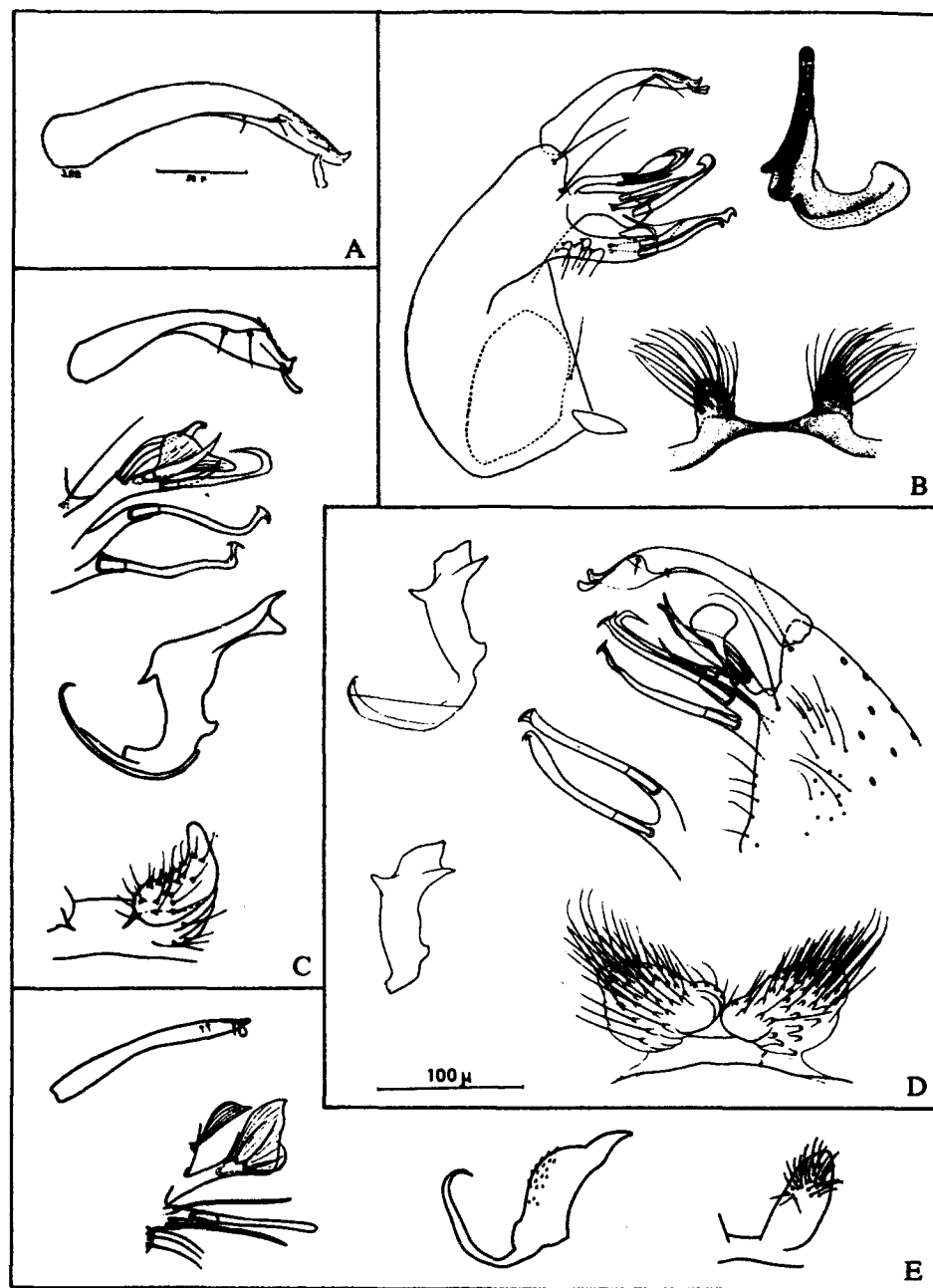


Fig. 32. A,B, *Culex delpontei*: A, Duret 1953 (as *paracrybda*); B, Duret 1954 (as *paracribda*). C, *Culex distinguendus*: Rozeboom and Komp 1950. D, *Culex dolichophyllus*: Clastrier 1970b. E, *Culex dunni*: Rozeboom and Komp 1950.

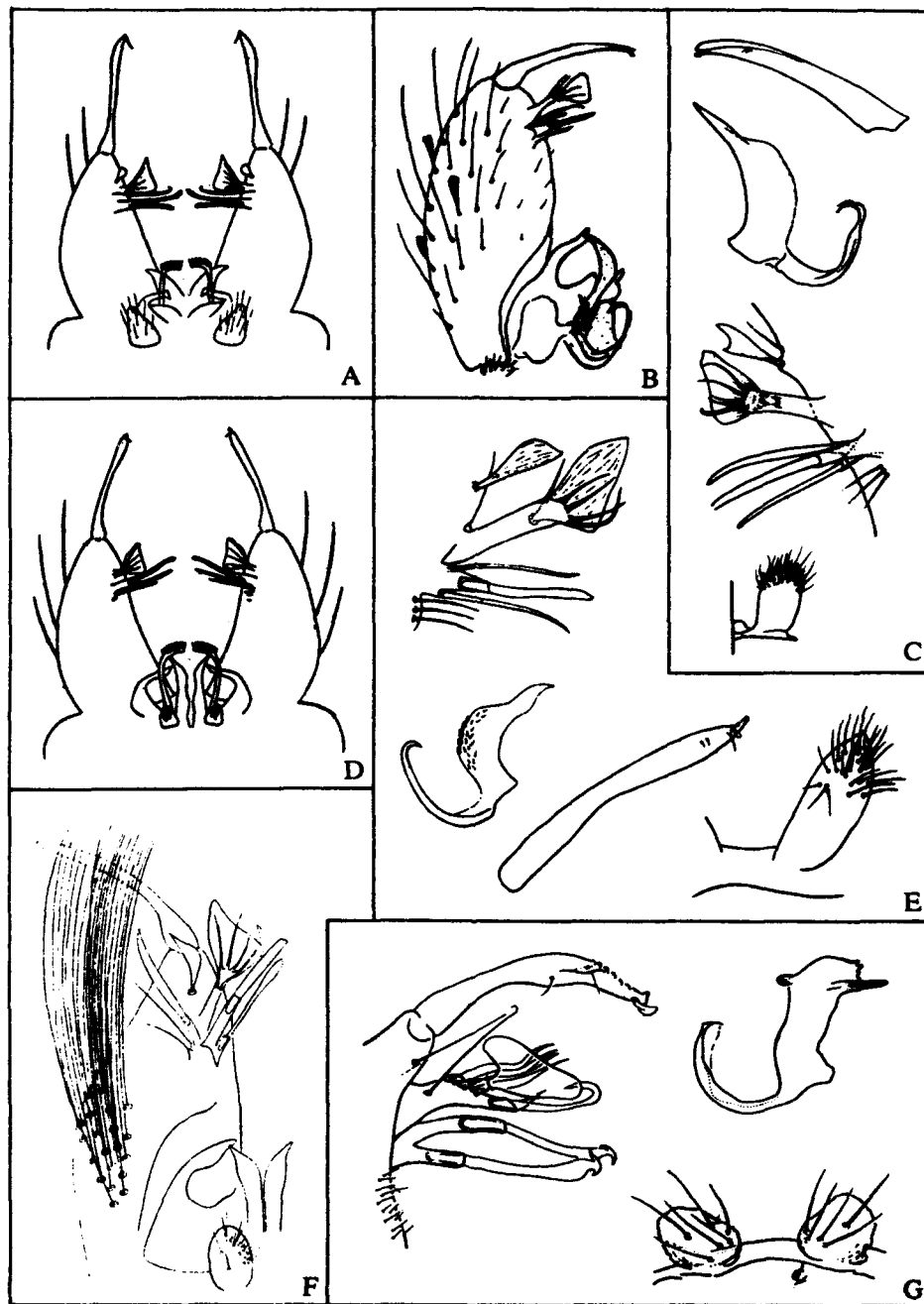


Fig. 33. A-F, *Culex dunnii*: A, Dyar 1928; B, Dyar 1923d; C, Forattini 1965; D, Dyar 1928 (as *ruffinis*); E, Cova Garcia, Sutil and Rausseo 1966a; F, Root 1927b (as *exedrus*). G, *Culex daretii*: Casal and Garcia 1968b.

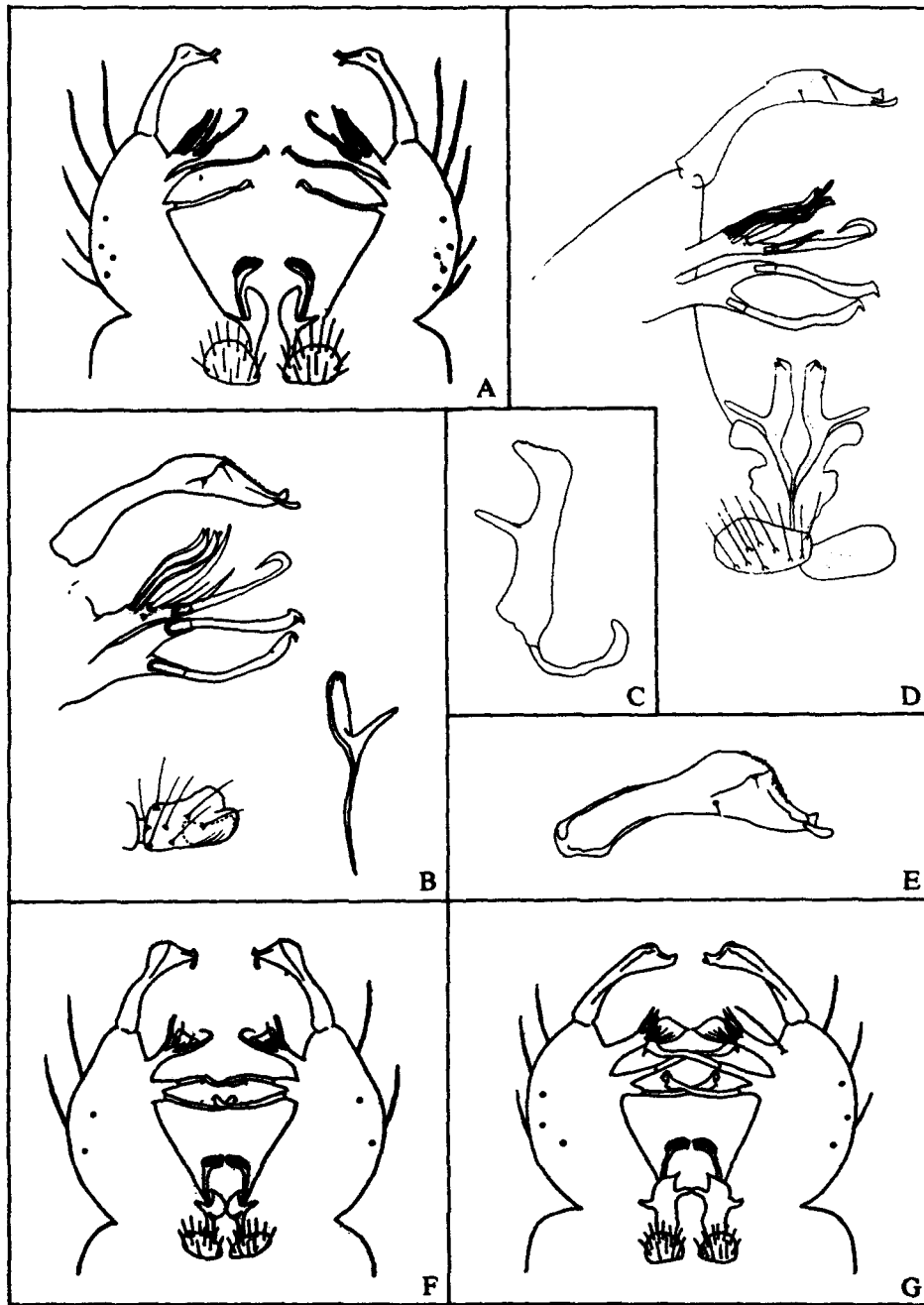


Fig. 34. A-D, *Culex dylius*: A, Dyar 1928 (as elevator); B, Rozeboom and Komp 1950; C, Sirivanakarn 1983; D, Root 1927b. E-G, *Culex eastor*: E, Sirivanakarn 1983; F, Dyar 1928; G, Dyar 1928 (as *manaosensis*).



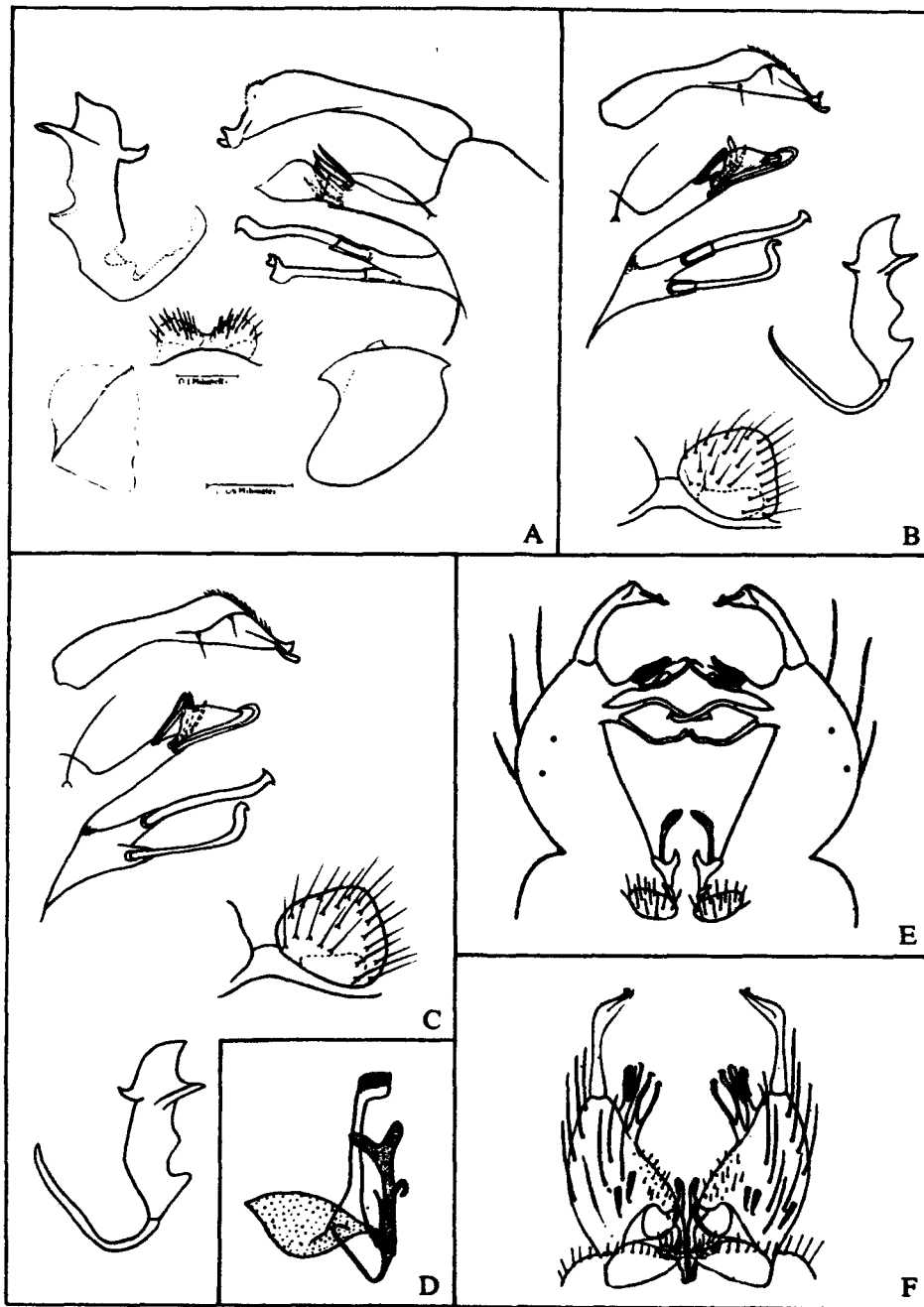


Fig. 35. A-C, *Culex eastor*: A, Evans 1924 (as *manaosensis*); B, Rozeboom and Komp 1950; C, Lane 1953. D-F, *Culex educator*: D, Dyar 1918a; E, Dyar 1928; F, Howard, Dyar and Knab 1913 (as *apeticus*).

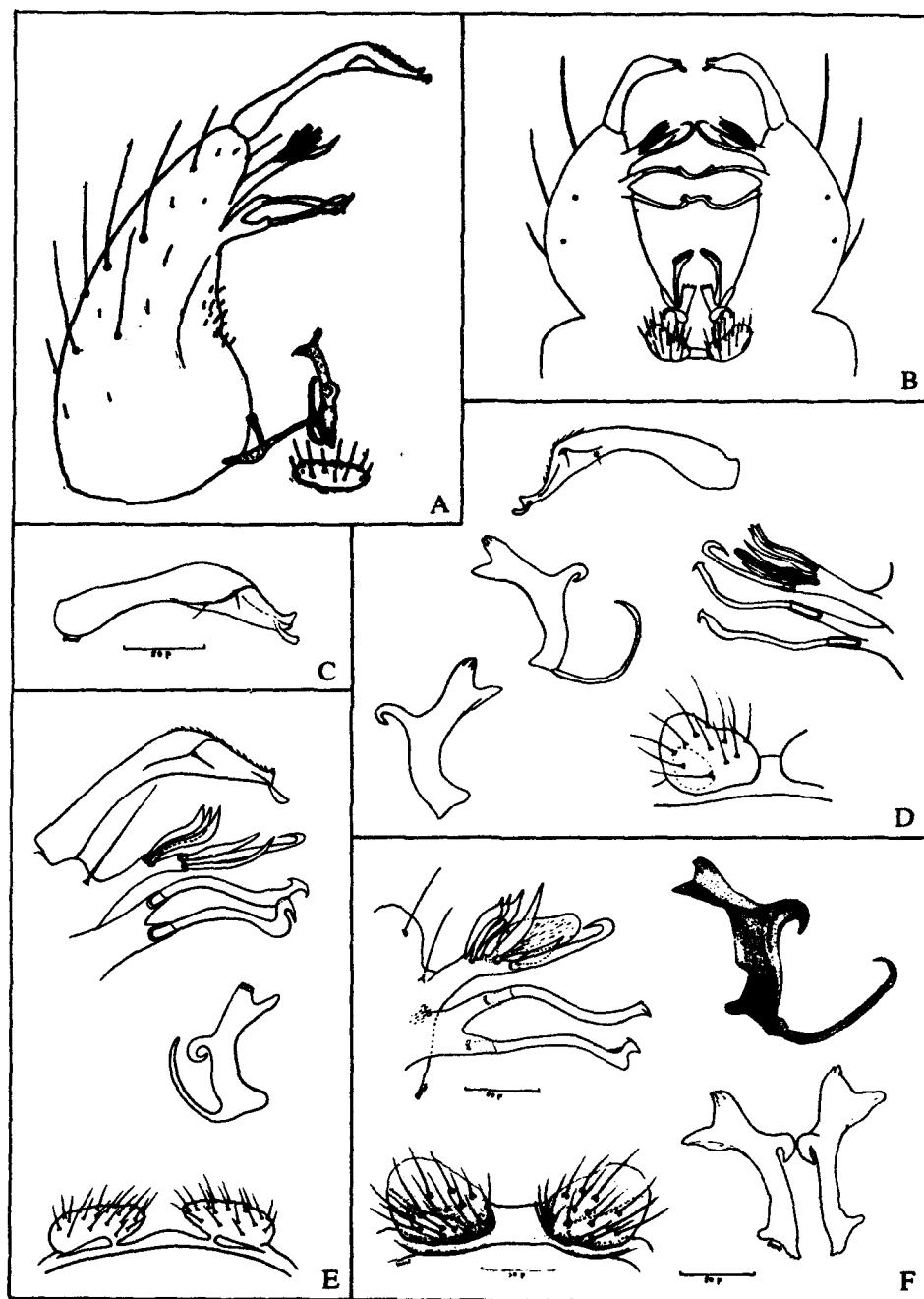


Fig. 36. *Culex educator*: A, Dyar and Ludlow 1922 (as *aneles*); B, Dyar 1928 (as *bibulus*); C, Duret 1953; D, Rozeboom and Komp 1950; E, Lane 1953; F, Duret 1954.

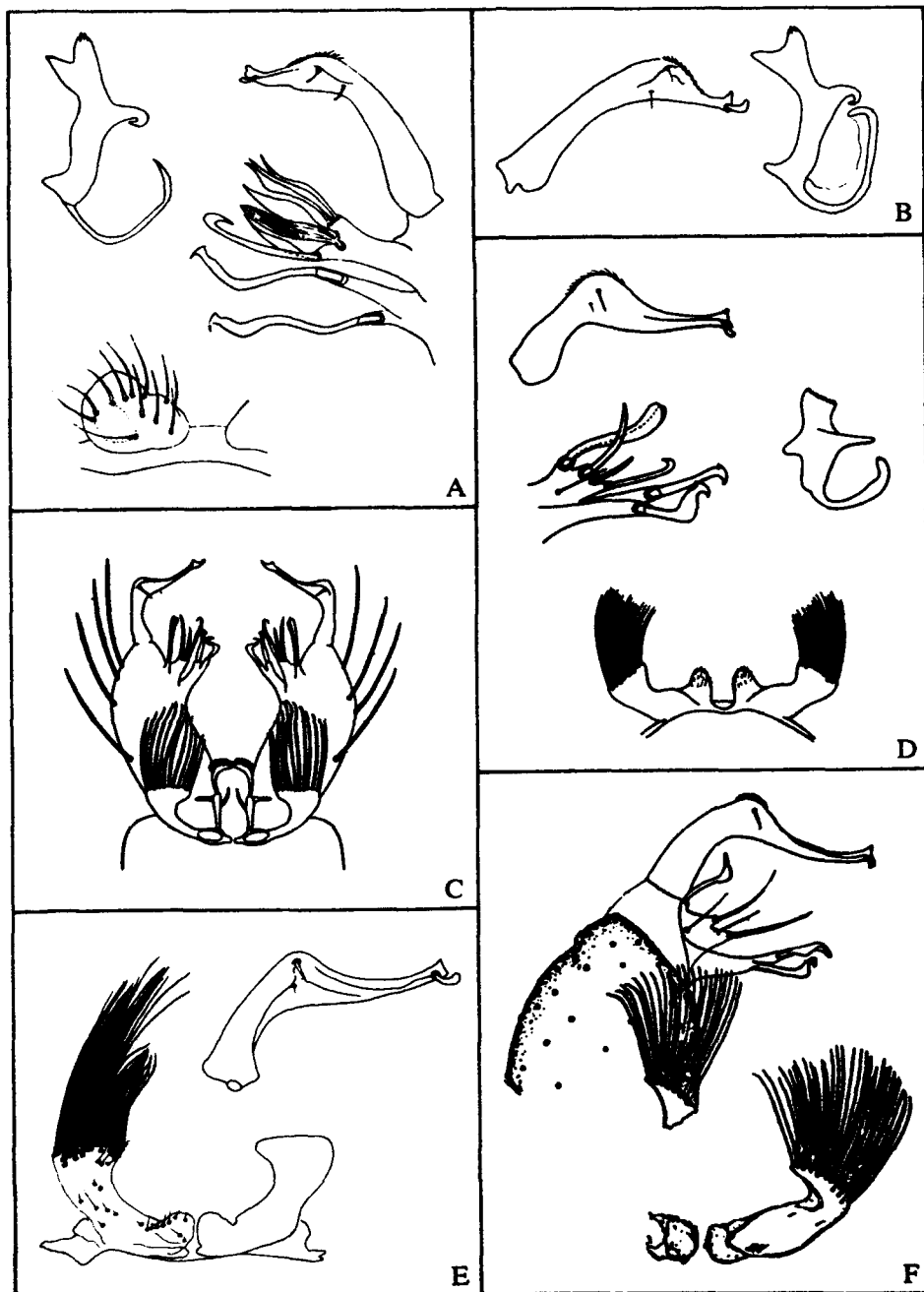


Fig. 37. A,B, *Culex educator*: A, Cova Garcia, Sutil and Rausseo 1966a; B, Sirivanakarn 1983. C-F, *Culex egcymon*: C, Dyar 1928; D, Lane 1953; E, Sirivanakarn 1983; F, Dyar 1923a.

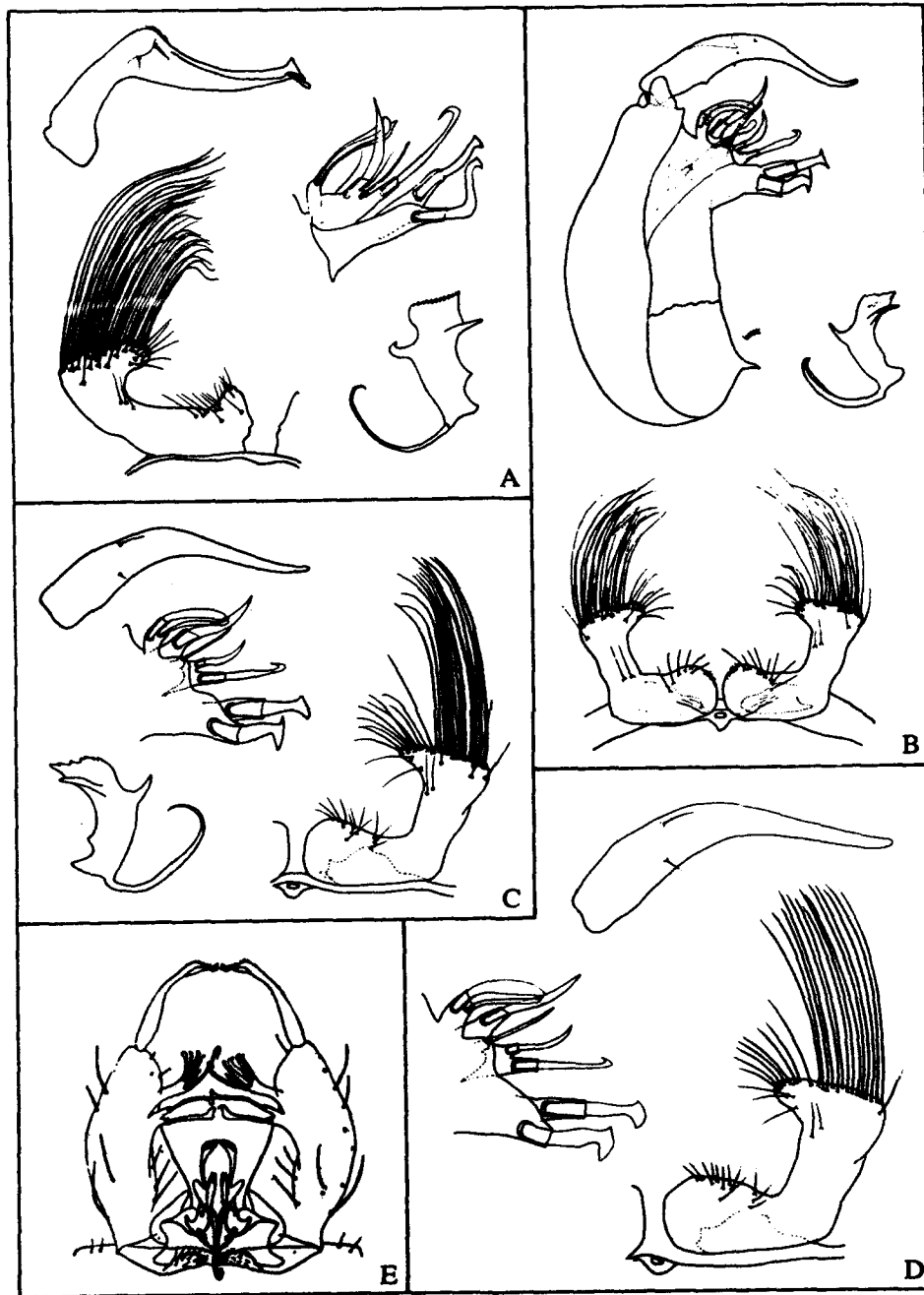


Fig. 38. A, *Culex egcymon*: Rozeboom and Komp 1950. B-D, *Culex elephas*: B, Komp 1936b; C, Rozeboom and Komp 1950; D, Lane 1953. E, *Culex elevator*: Howard, Dyar and Knab 1913.

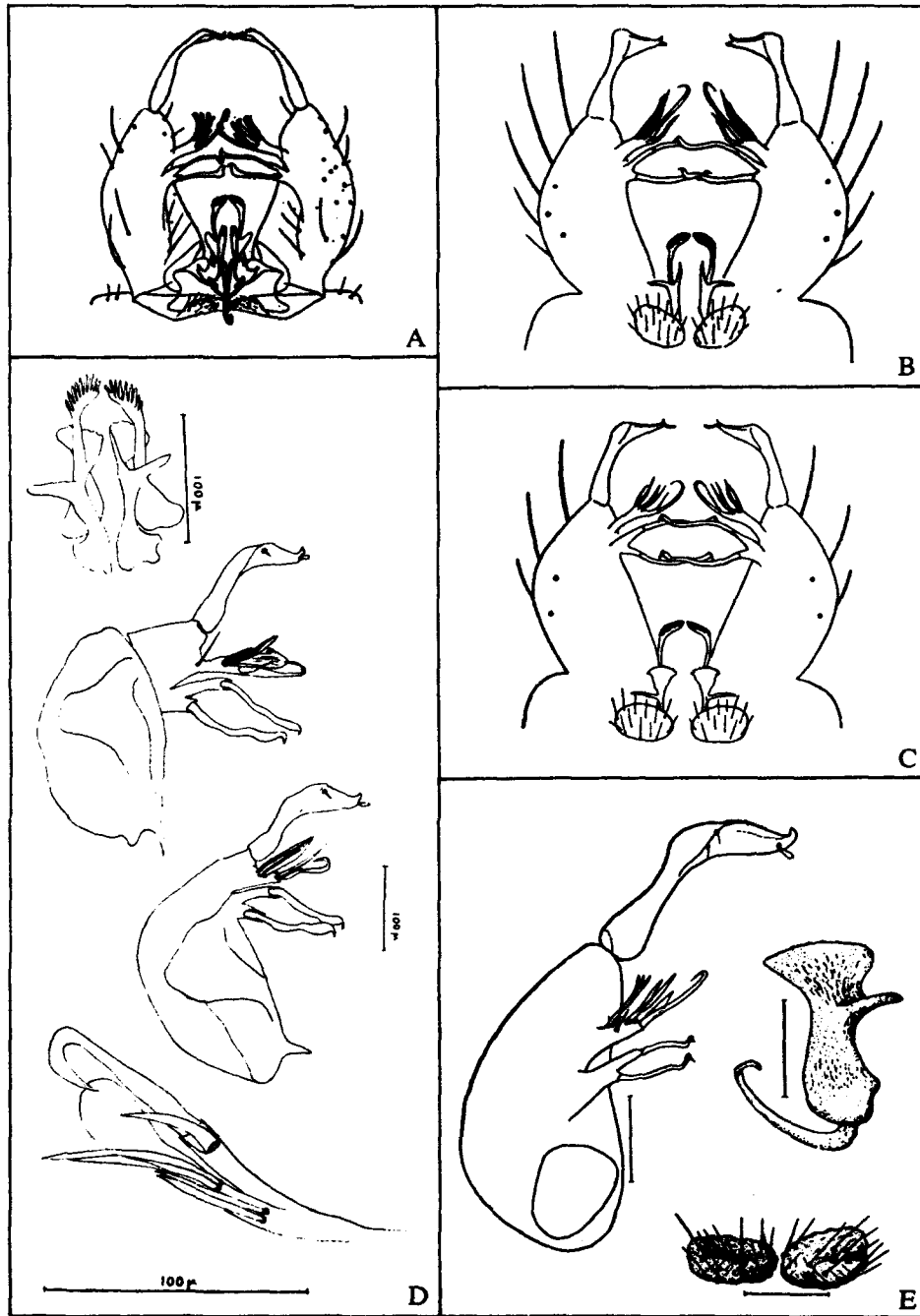


Fig. 39. *Culex elevator*: A, Dyar 1928; B, Dyar 1928 (as *dornarum*); C, Dyar 1928 (as *curryi*); D, Senevet 1938 (as *bonneti*); E, Wirth 1945.

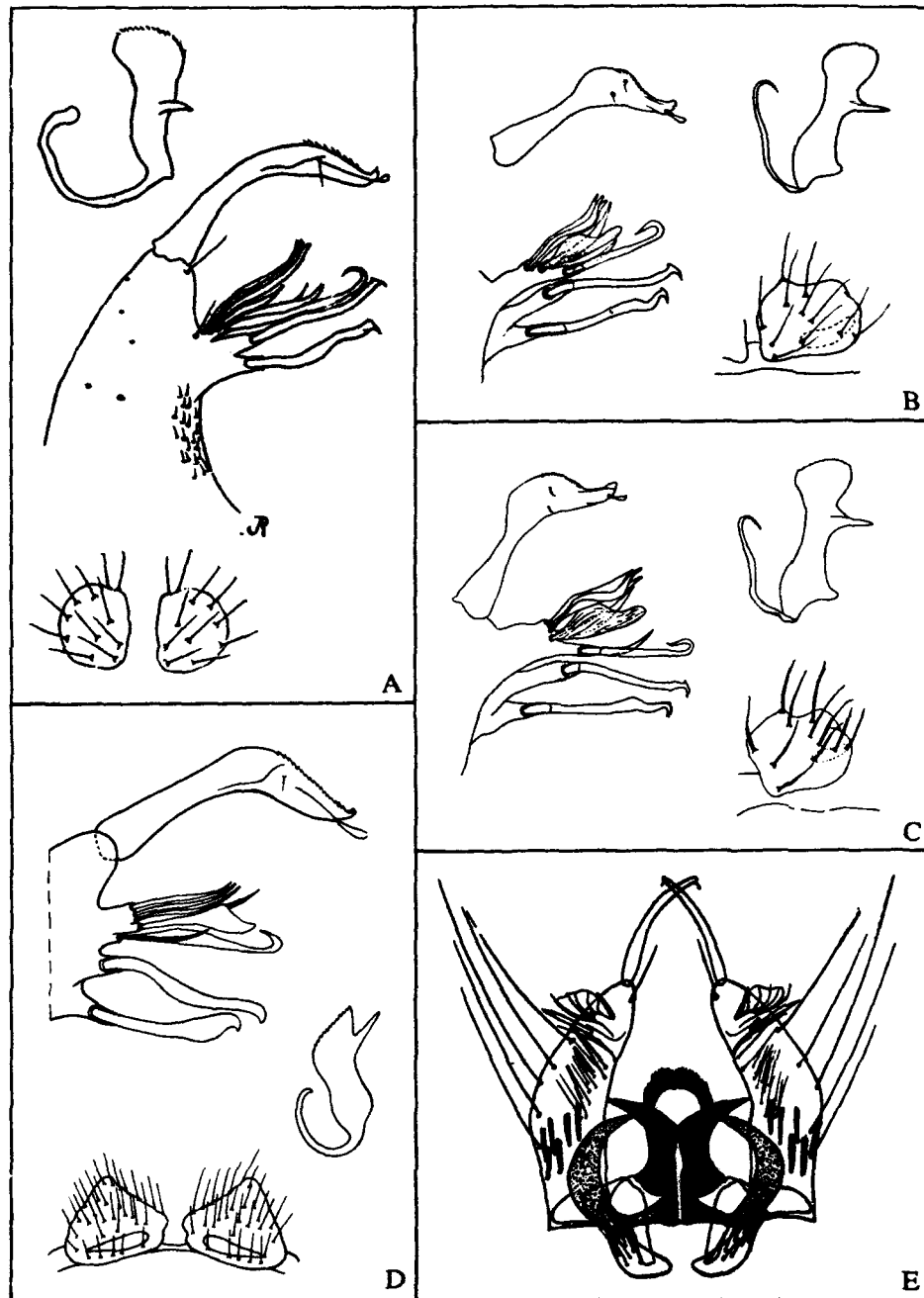


Fig. 40. A-D, *Culex elevator*: A, Anduze 1949a (as *vogelsangi*); B, Rozeboom and Komp 1950; C, Cova Garcia, Sutil and Rausseo 1966a; D, Lane 1953. E, *Culex ensiformis*: Bonne and Bonne-Wepster 1925.

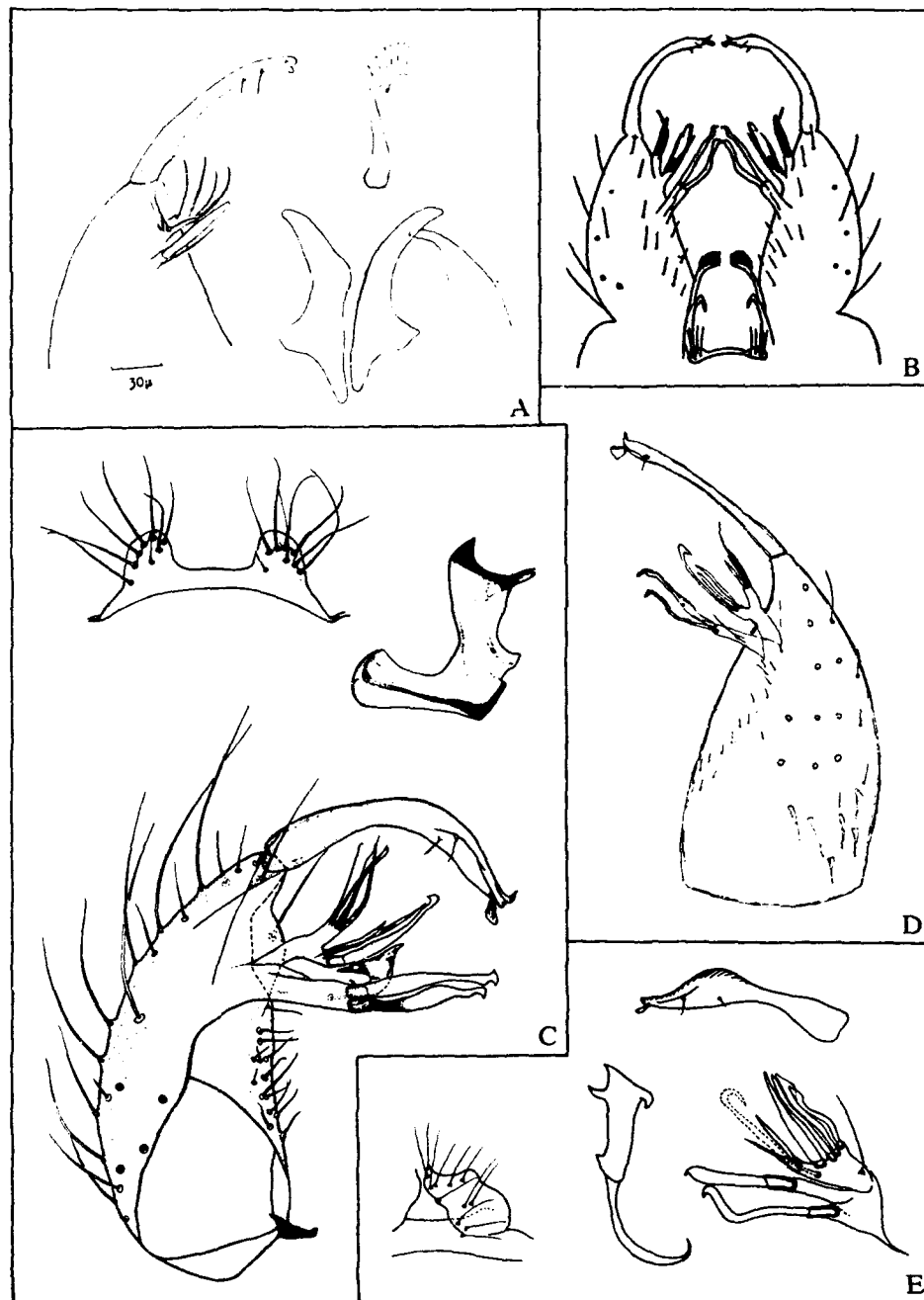


Fig. 41. A, *Culex ensiformis*: Senevet and Abonnenc 1939. B-D, *Culex epanastasis*: B, Dyar 1928; C, Galindo and Blanton 1955 (as *pseudotaeniopus*); D, Dyar 1922. E, *Culex equinoxialis*: Rozeboom and Komp 1950.

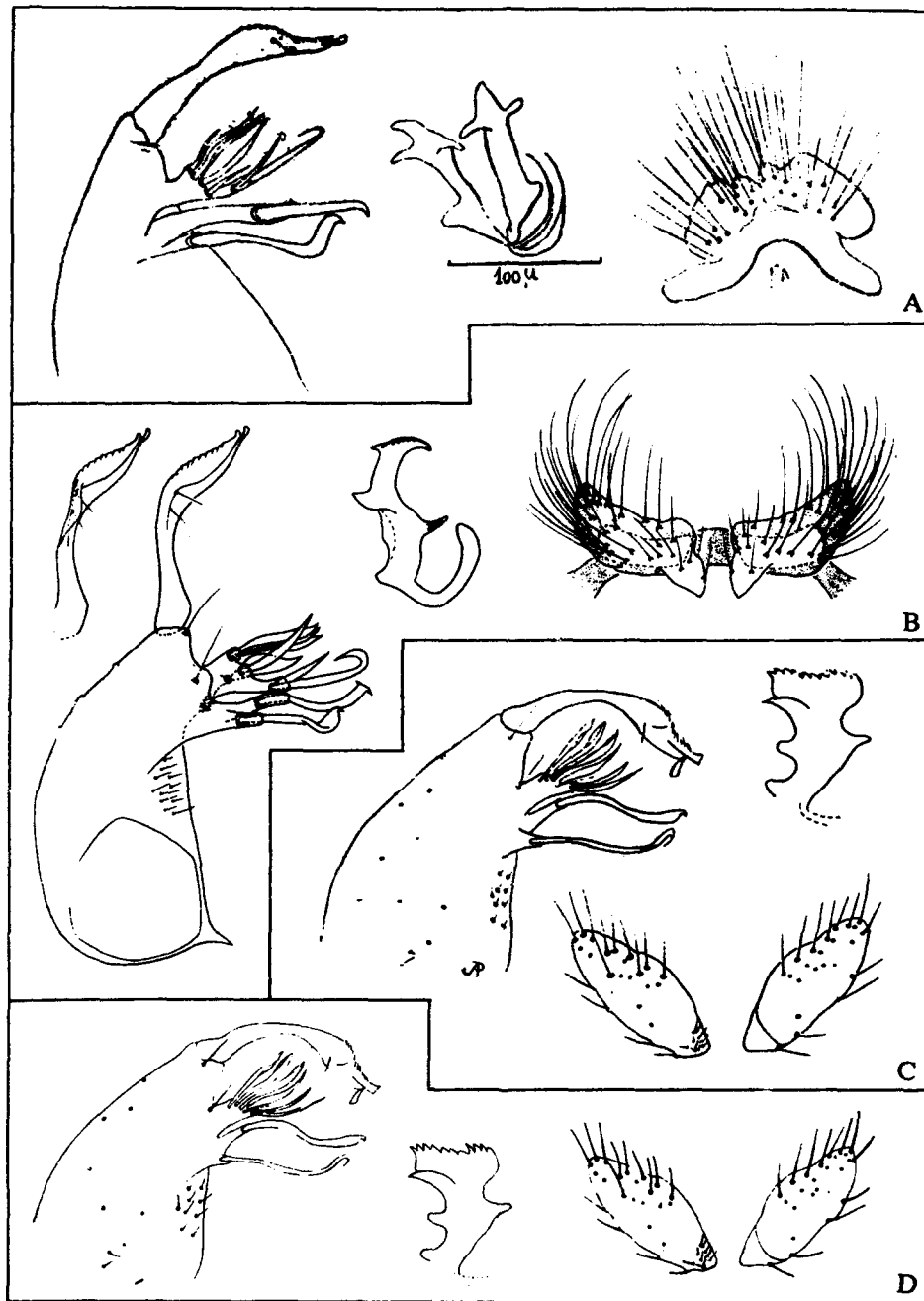


Fig. 42. A, *Culex equinoxialis*: Floch and Abonnenc 1945c. B, *Culex ernanii*: Duret 1968e. C,D, *Culex ernsti*: C, Anduze 1949a; D, Cova Garcia, Sutil and Rausseo 1966a.



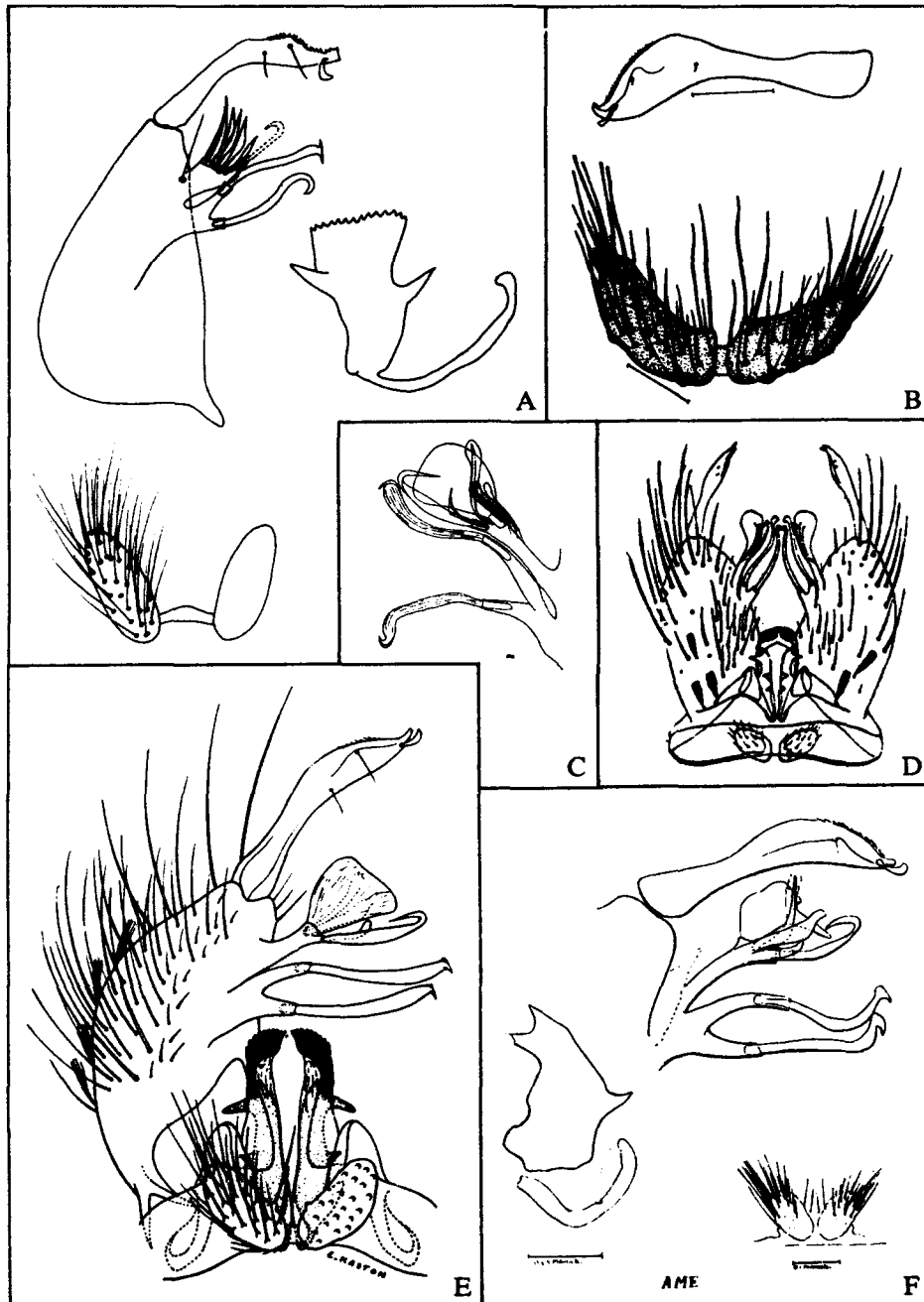
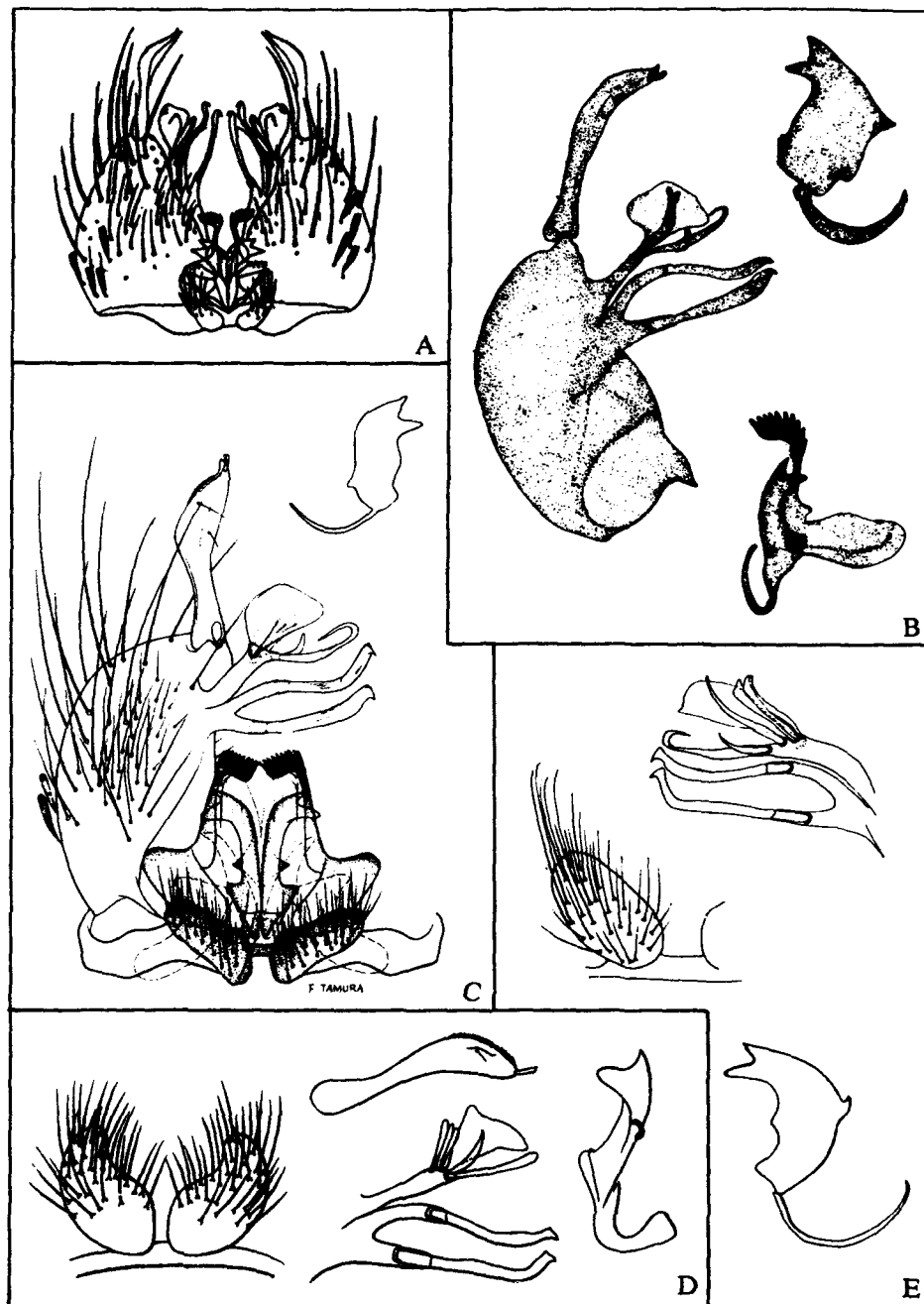


Fig. 43. A, *Culex ernsti*: Sirivanakarn 1983. B-F, *Culex erraticus*: B, Wirth 1945; C, Root 1922 (as *borinqueni*); D, Howard, Dyar and Knab 1913 (as *leprincei*); E, Carpenter, Middlekauff and Chamberlain 1946; F, Evans 1924 (as *tovari*).



**Fig. 44.** *Culex erraticus*: A, Howard, Dyar and Knab 1913 (as *trachycampa*); B, Roth 1943; C, Carpenter and LaCasse 1955; D, Lane 1953; E, Rozeboom and Komp 1950.

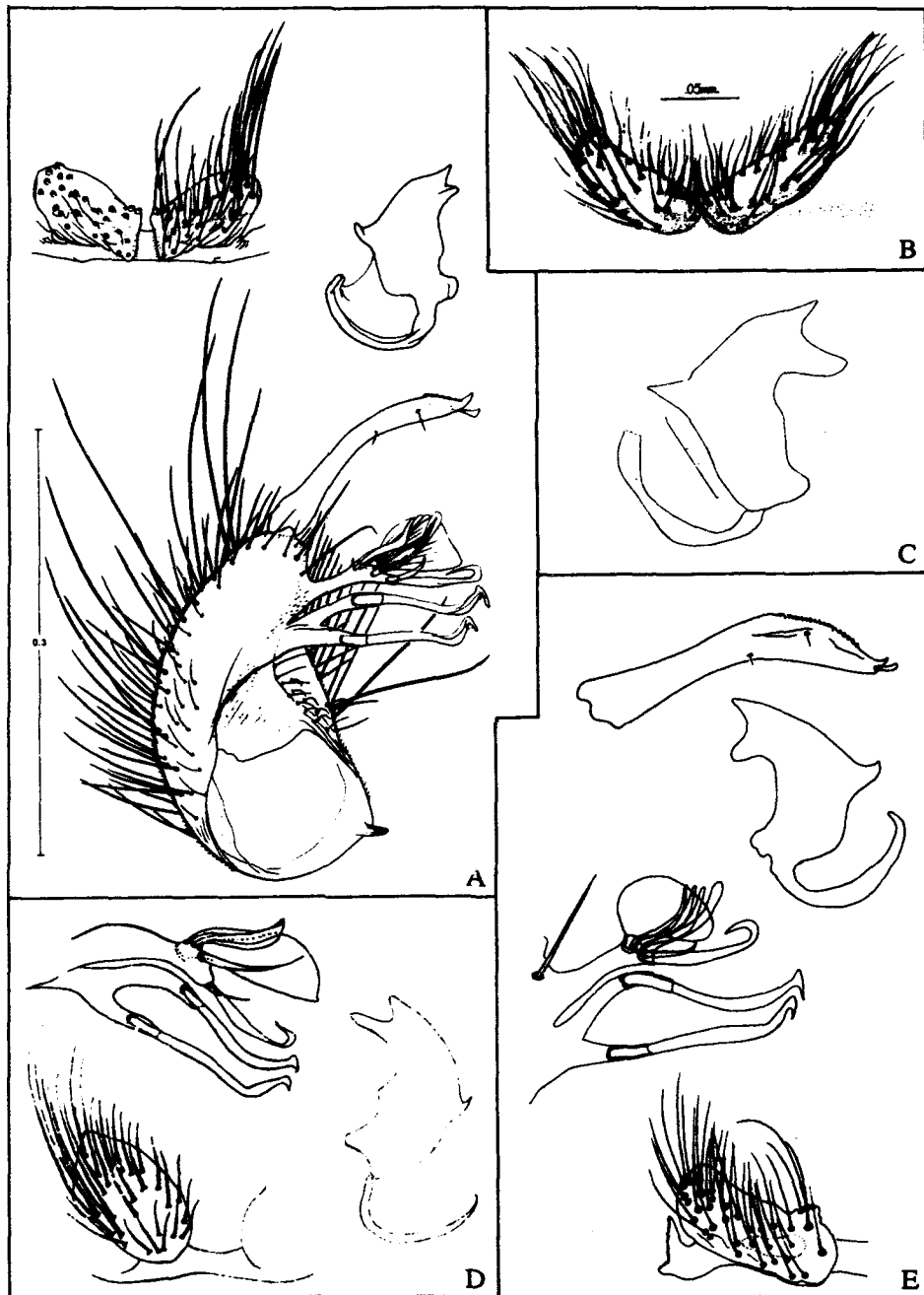


Fig. 45. *Culex erraticus*: A, Belkin, Heinemann and Page 1970; B, Roth and Young 1944; C, King and Bradley 1937; D, Cova Garcia, Sutil and Rausseo 1966a; E, Sirivanakarn 1983.

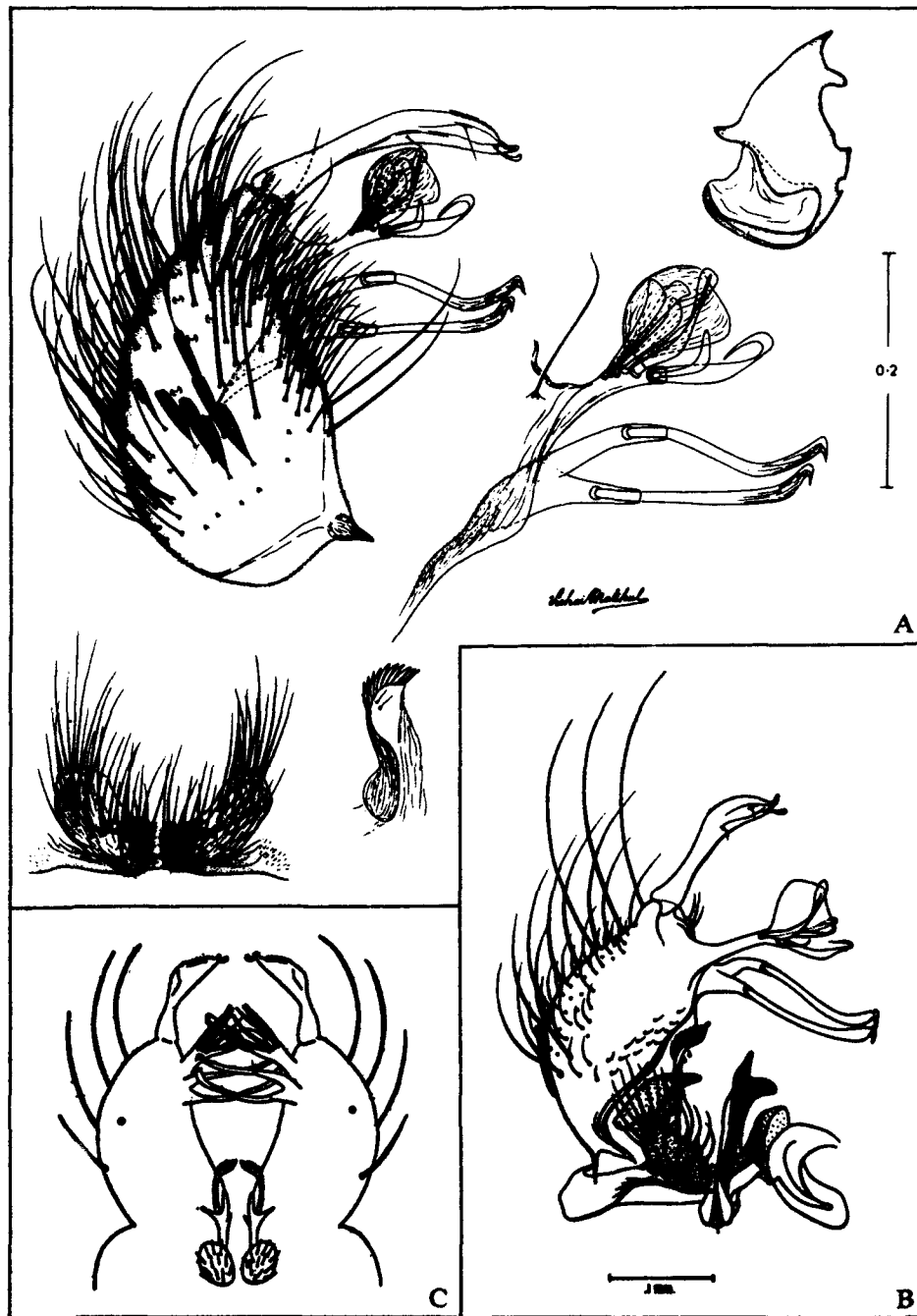


Fig. 46. A,B, *Culex erraticus*: A, Sirivanakarn 1978a; B, Barr 1958. C, *Culex evansae*: C, Dyar 1928.

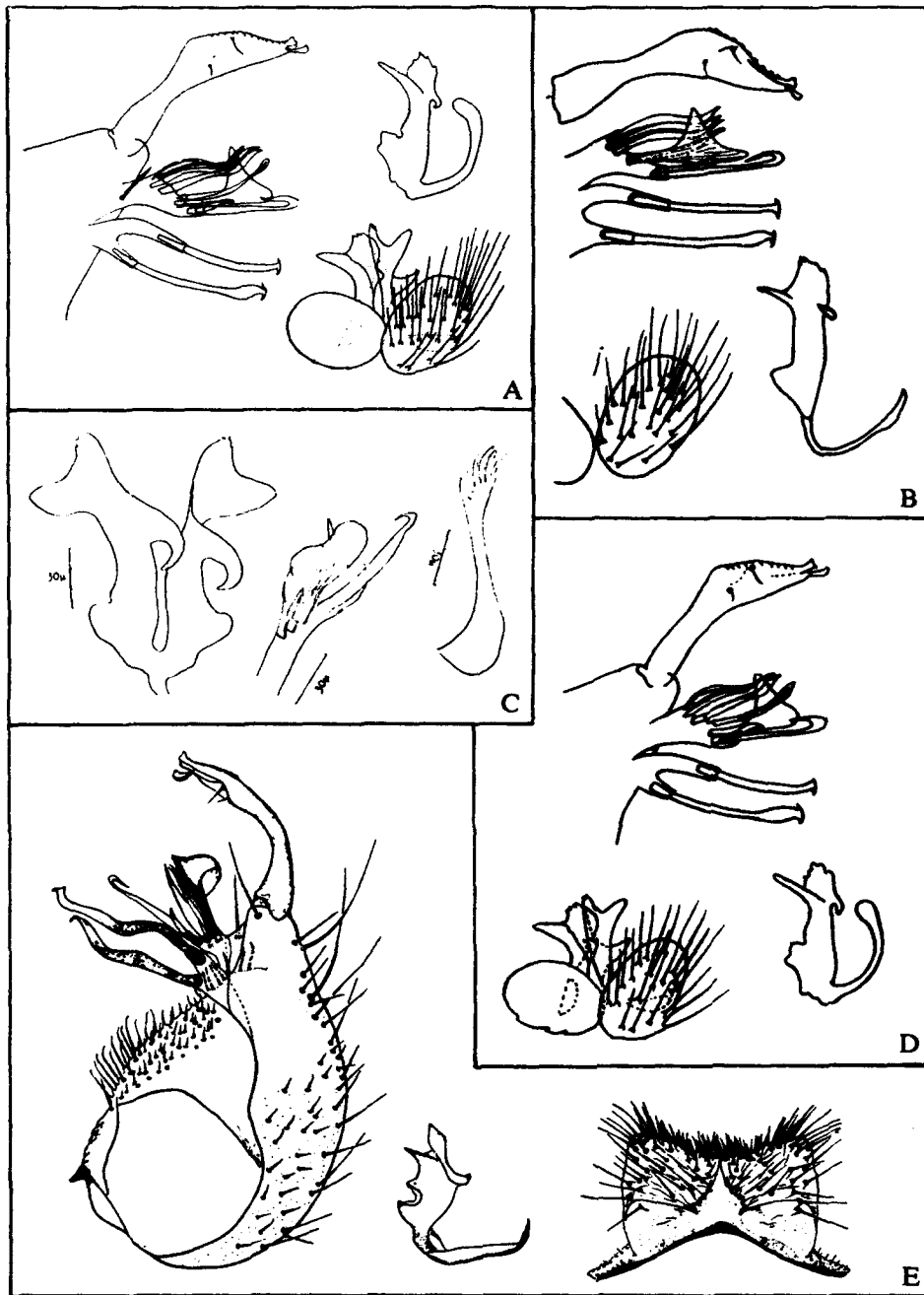


Fig. 47. A-D, *Culex evansae*: A, Root 1927b; B, Rozeboom and Komp 1950; C, Senevet and Abonnenc 1939; D, Lane 1953. E, *Culex fairchildi*: Galindo and Blanton 1954.

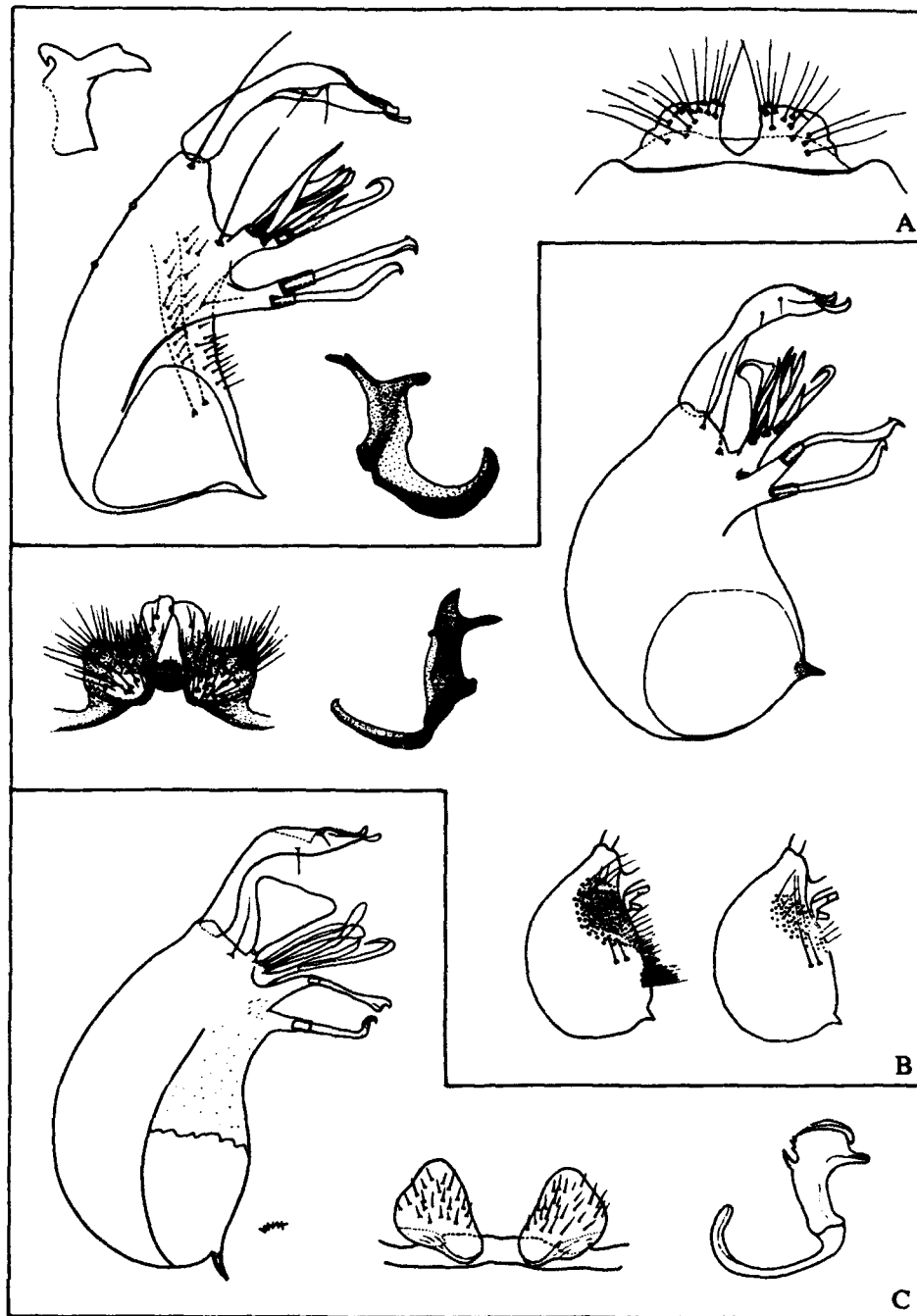


Fig. 48. A, *Culex faurani*: Duret 1968c. B, *Culex ferreri*: Duret 1968c. C, *Culex flabellifer*: Komp 1936b.

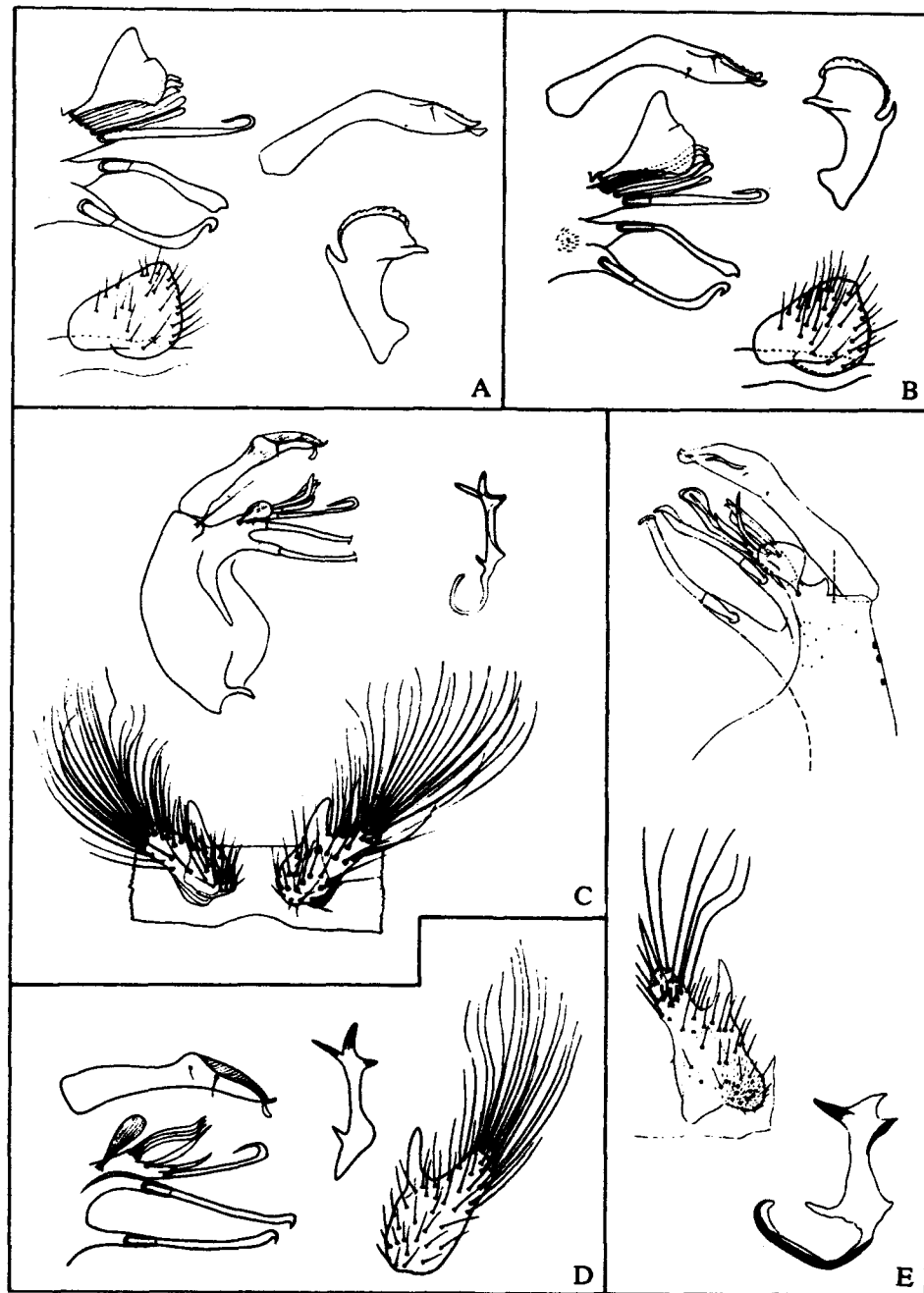


Fig. 49. A,B, *Culex flabellifer*: A, Lane 1953; B, Rozeboom and Komp 1950. C-E, *Culex foliafer*: C, Komp and Rozeboom 1951; D, Rozeboom and Komp 1950 (as sp. A); E, Clastrier 1968.

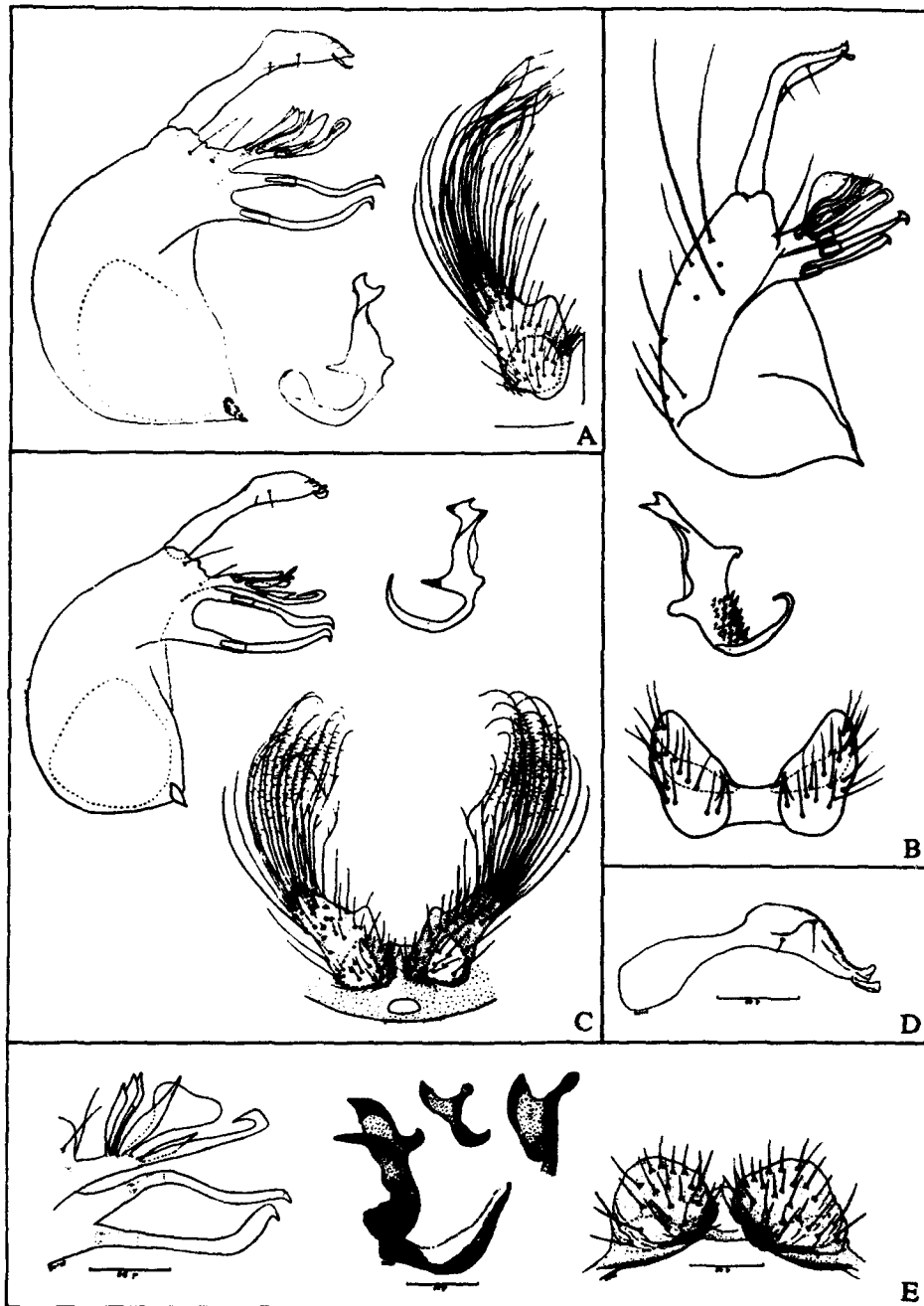


Fig. 50. A, *Culex galvaoui*: Duret 1968b. B, *Culex galindoi*: Komp and Rozeboom 1951. C, *Culex garcesi*: Duret 1968b. D,E, *Culex glyptosalpinx*: D, Duret 1953 (as *intrincatus*); E, Duret 1954 (as *intrincatus*).



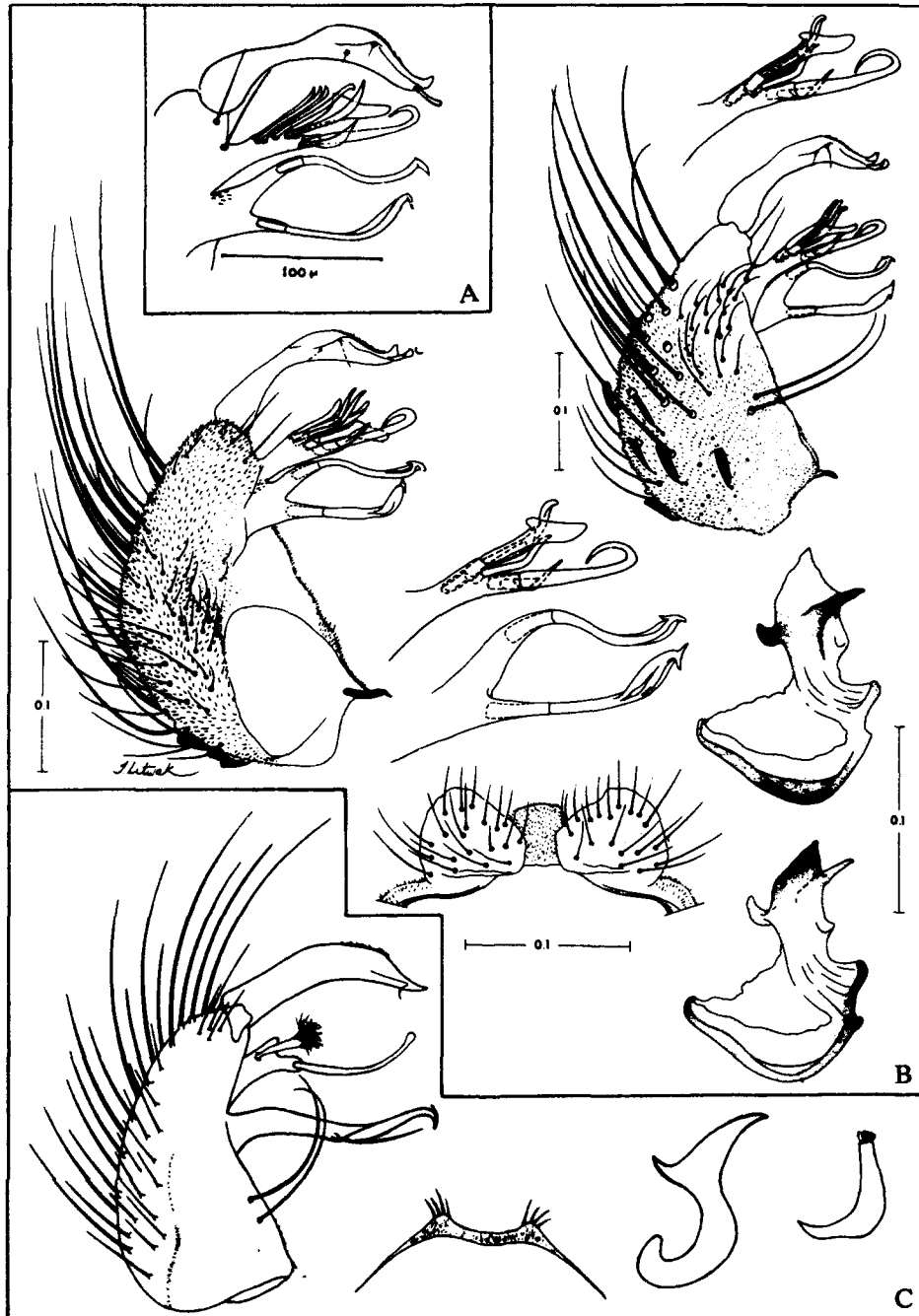


Fig. 51. A,B, *Culex glyptosalpinx*: A, Duret and Barreto 1956 (as *intricatus*); B, Harbach, Peyton and Harrison 1984. C, *Culex herrerae*: Sutil Oramas, Pulido Florenzano, and Amarista Meneses 1987.

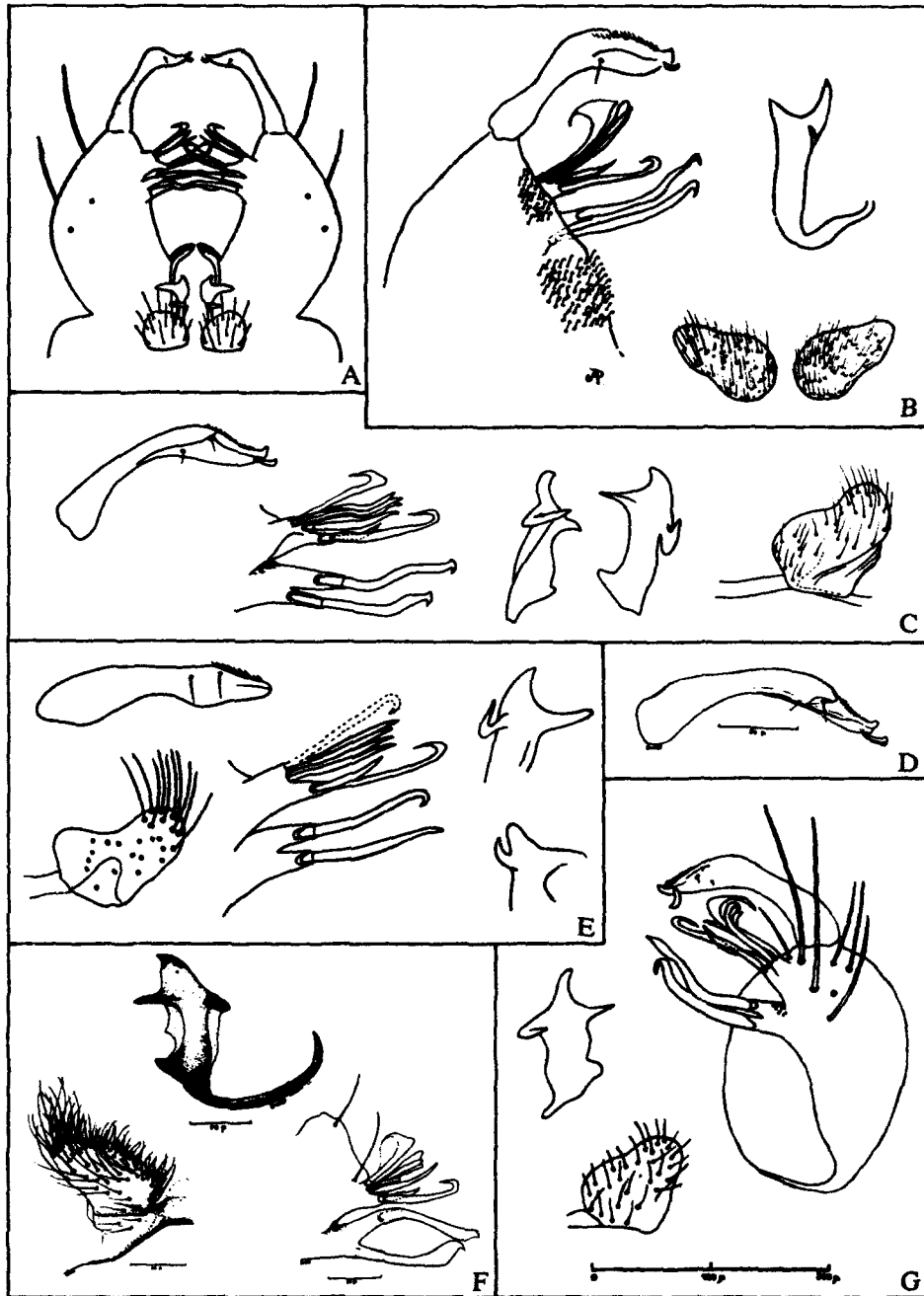


Fig. 52. *Culex idottus*: A, Dyar 1928; B, Anduze 1949a (as *terepaima*); C, Rozeboom and Komp 1950; D, Duret 1953; E, Lane 1953; F, Duret 1954; G, Floch and Fauran 1954.

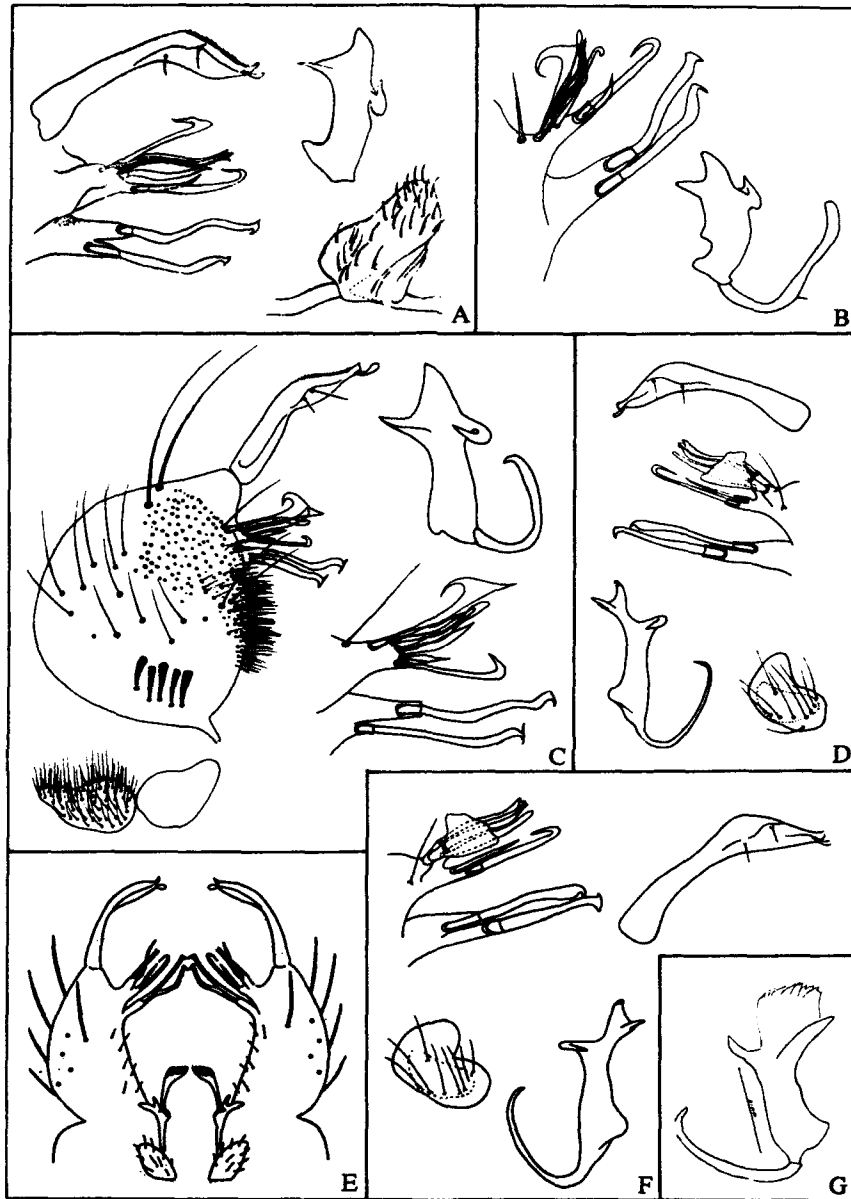


Fig. 53. A-C, *Culex idottus*: A, Cova Garcia, Sutil and Rausseo 1966a; B,C, Sirivanakarn 1983. D-F, *Culex inadmirabilis*: D, Rozeboom and Komp 1950; E, Dyar 1928; F, Lane 1953. G, *Culex inhibitor*: King and Bradley 1937.

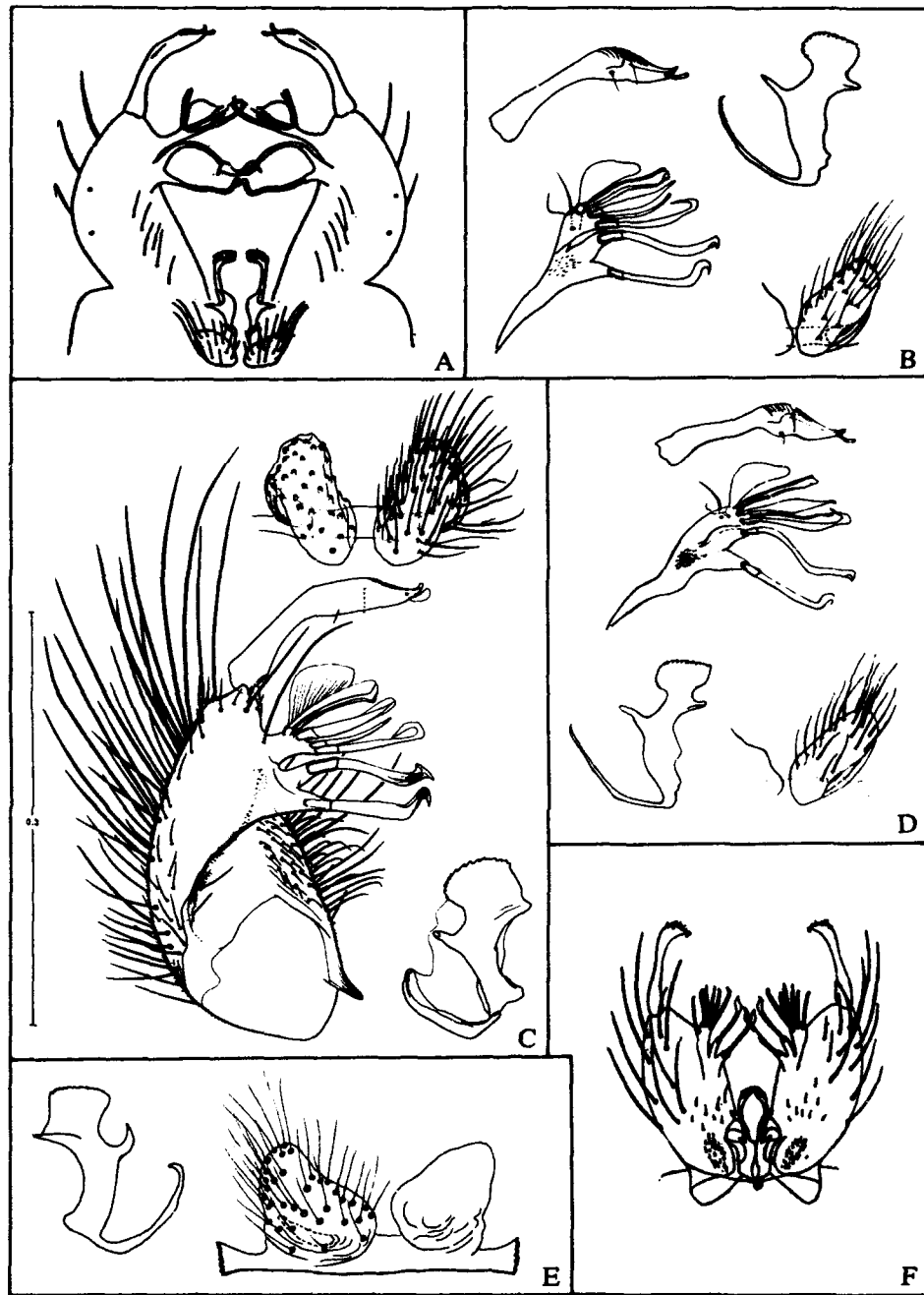


Fig. 54. *Culex inhibitor*: A, Dyar 1928; B, Rozeboom and Komp 1950; C, Belkin, Heinemann and Page 1970; D, Cova Garcia, Sutil and Rausseo 1966a; E, Sirivanakarn 1983; F, Howard, Dyar and Knab 1913.

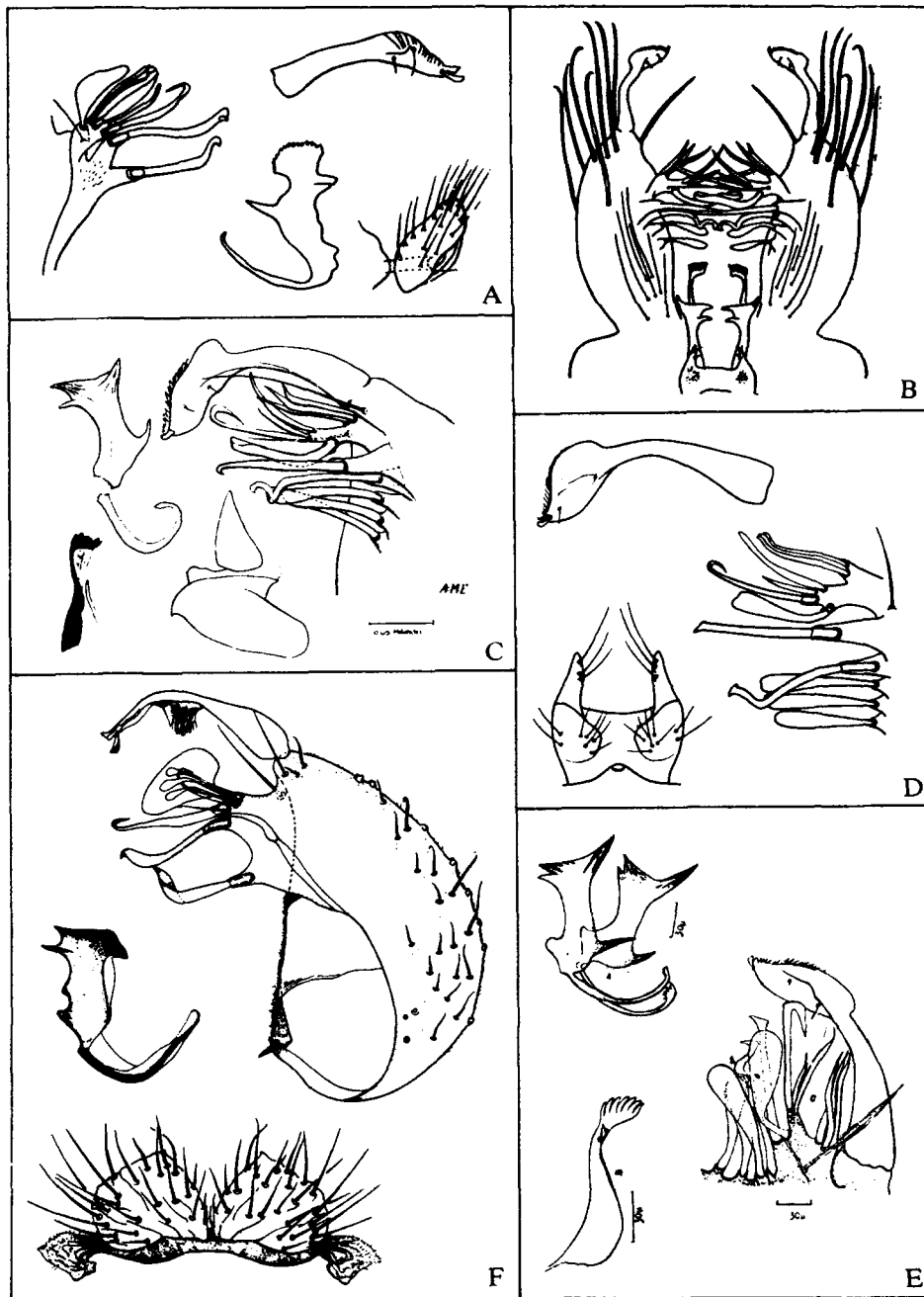


Fig. 55. A, *Culex inhibitor*: Lane 1953. B-E, *Culex innovator*: B, Dyar 1928; C, Evans 1924; D, Rozeboom and Komp 1950; E, Senevet and Abonnenc 1939. F, *Culex intonsus*: Galindo and Blanton 1955.

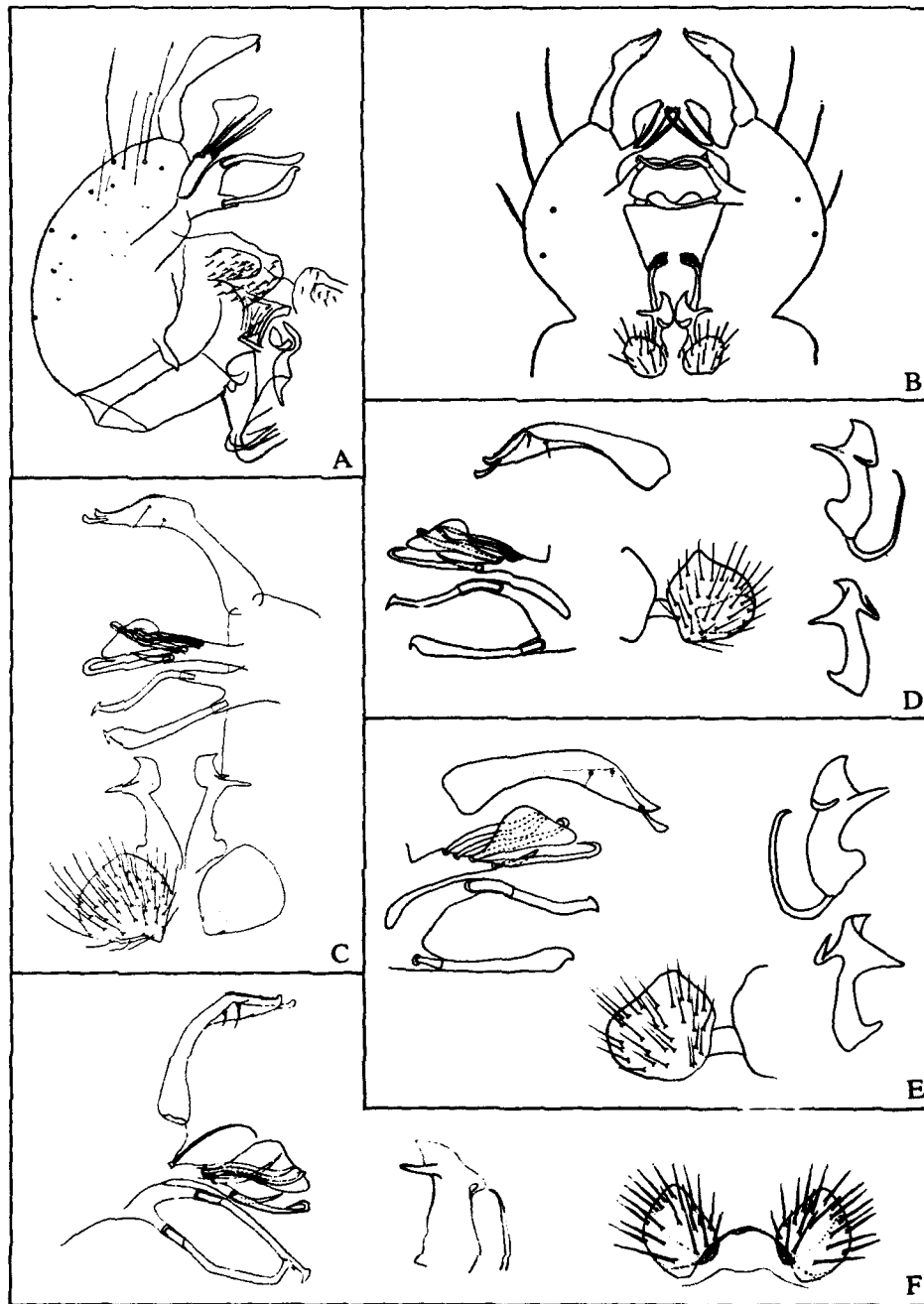


Fig. 56. *Culex intricatus*: A, Brethes 1916; B, Dyar 1928; C, Root 1927b (as *cenus*); D, Rozeboom and Komp 1950; E, Lane 1953; F, Cova Garcia, Sutil and Rausseo 1966a.

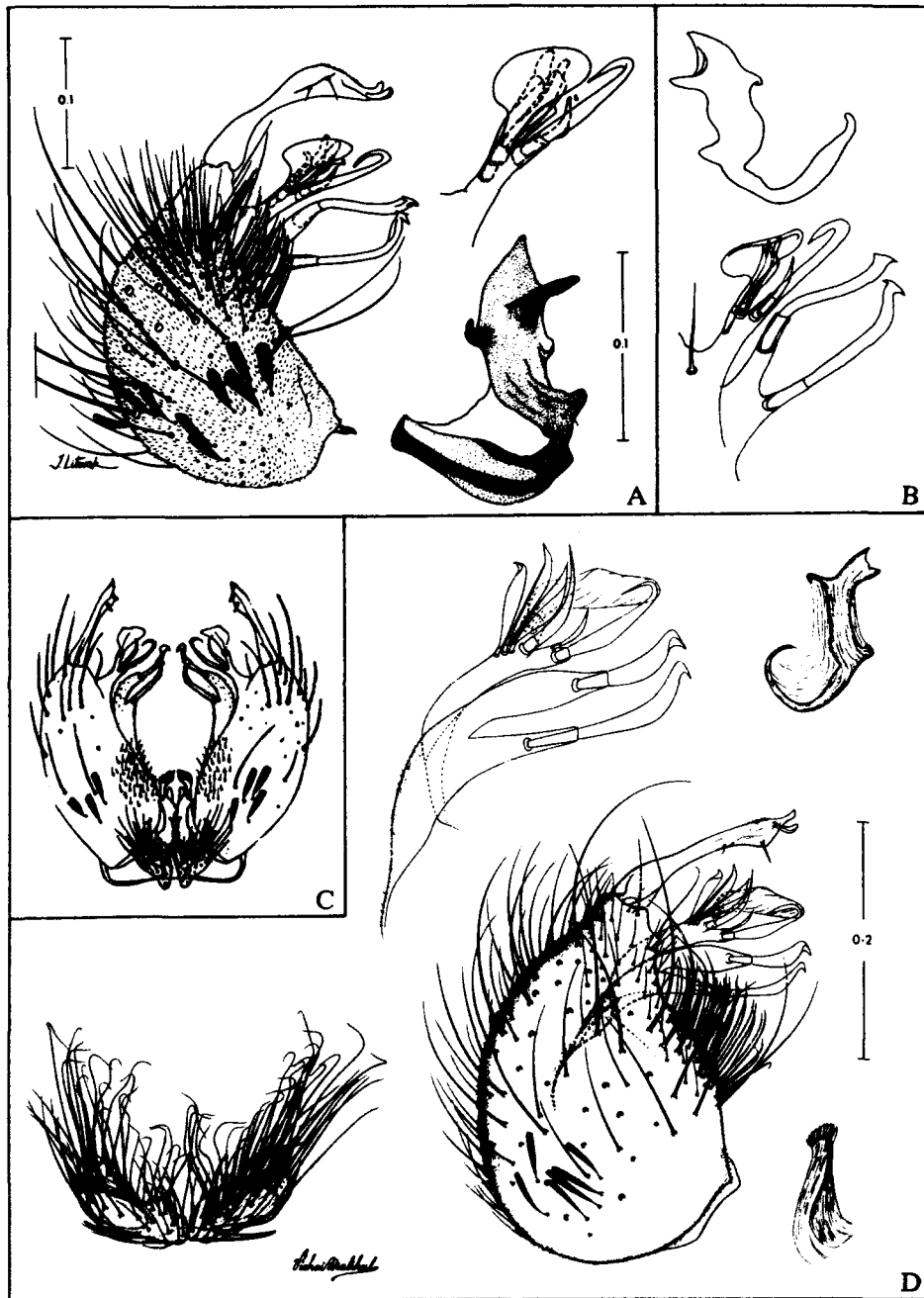


Fig. 57. A,B, *Culex intricatus*: A, Harbach, Peyton and Harrison 1984; B, Sirivanakarn 1983. C,D, *Culex invocator*: C, Howard, Dyar and Knab 1913; D, Sirivanakarn 1978a.

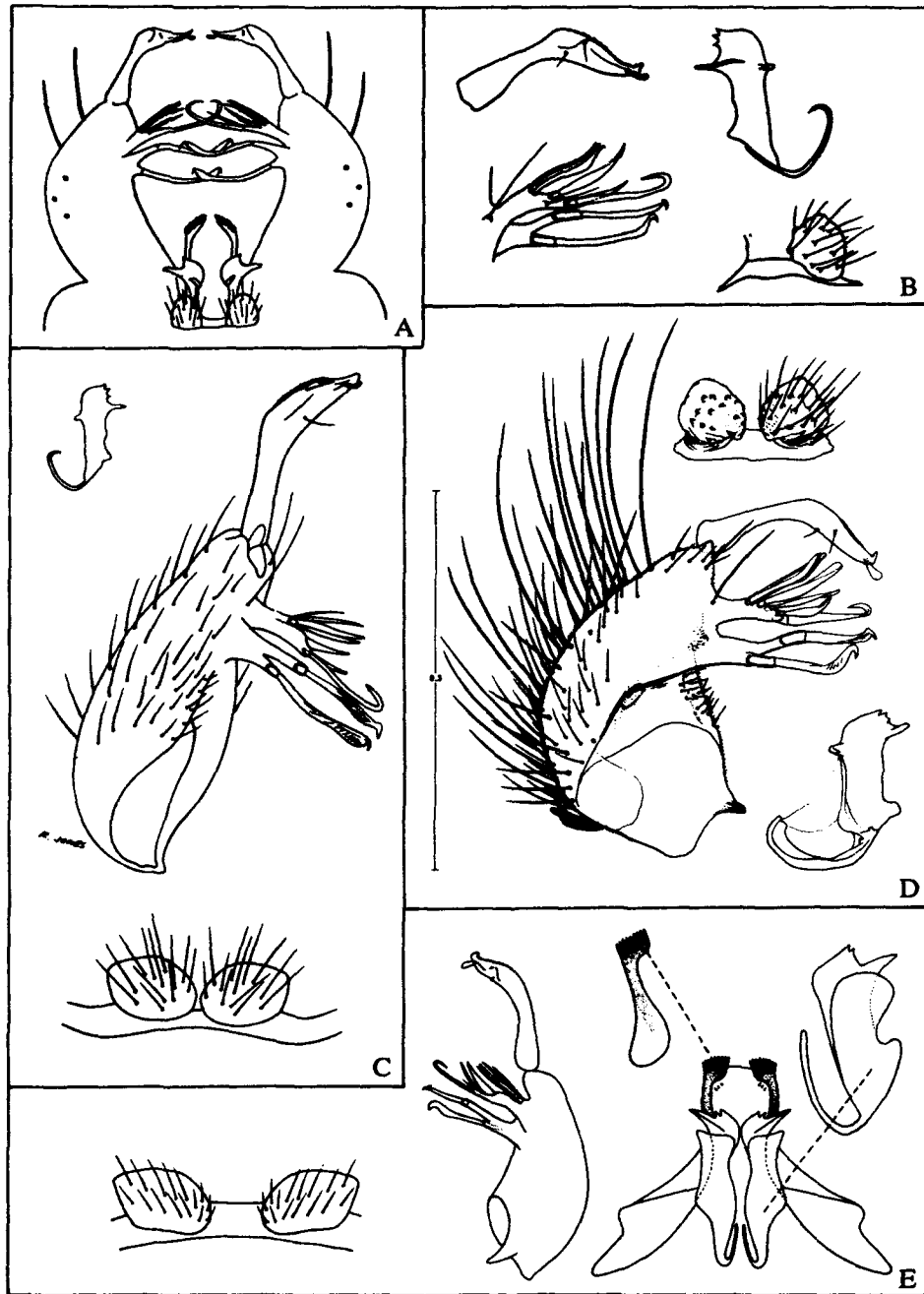


Fig. 58. *Culex iolambdis*: A, Dyar 1928; B, Rozeboom and Komp 1950; C, Carpenter and LaCasse 1955; D, Belkin, Heinemann and Page 1970; E, Pratt and Seabrook 1952.



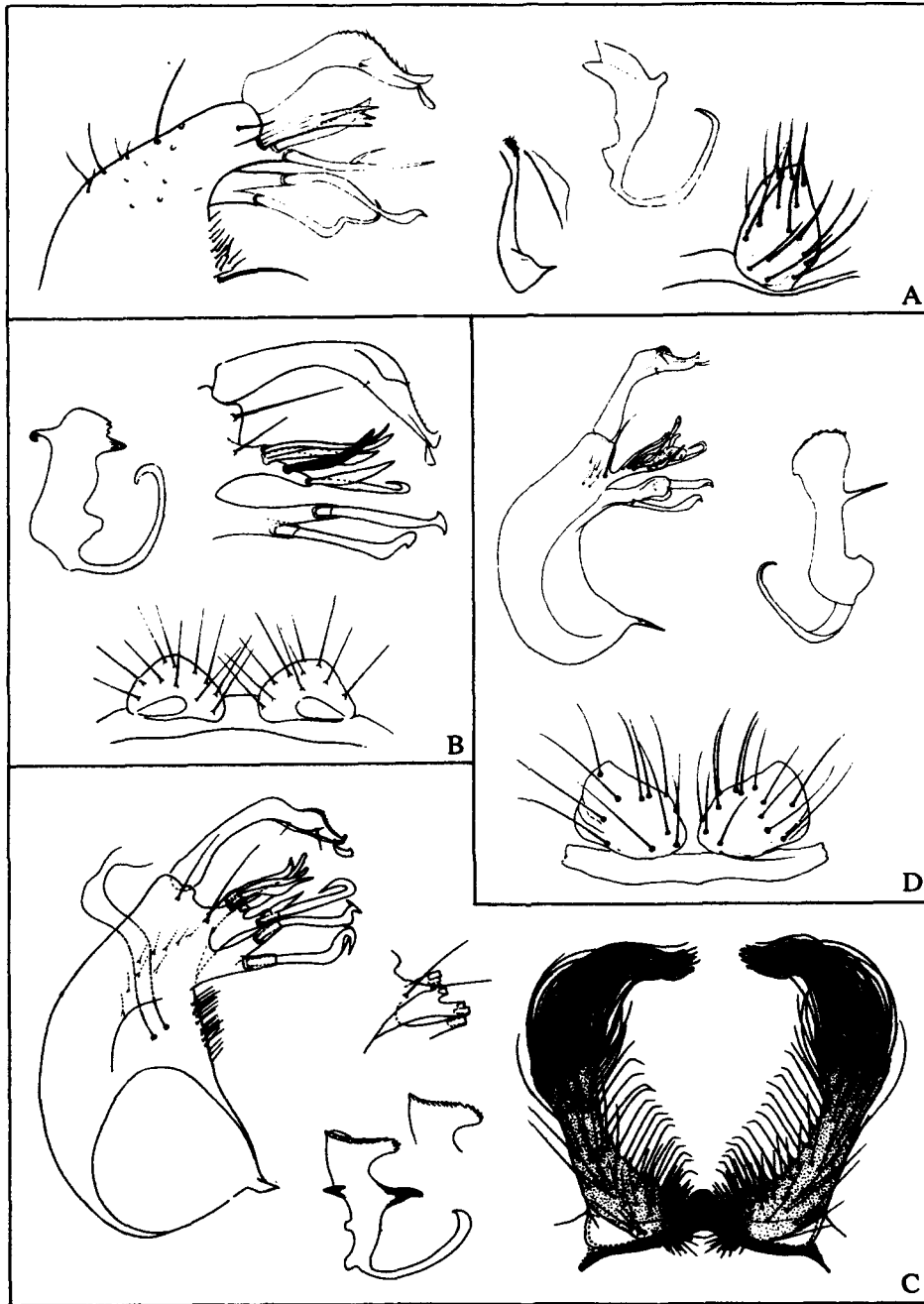
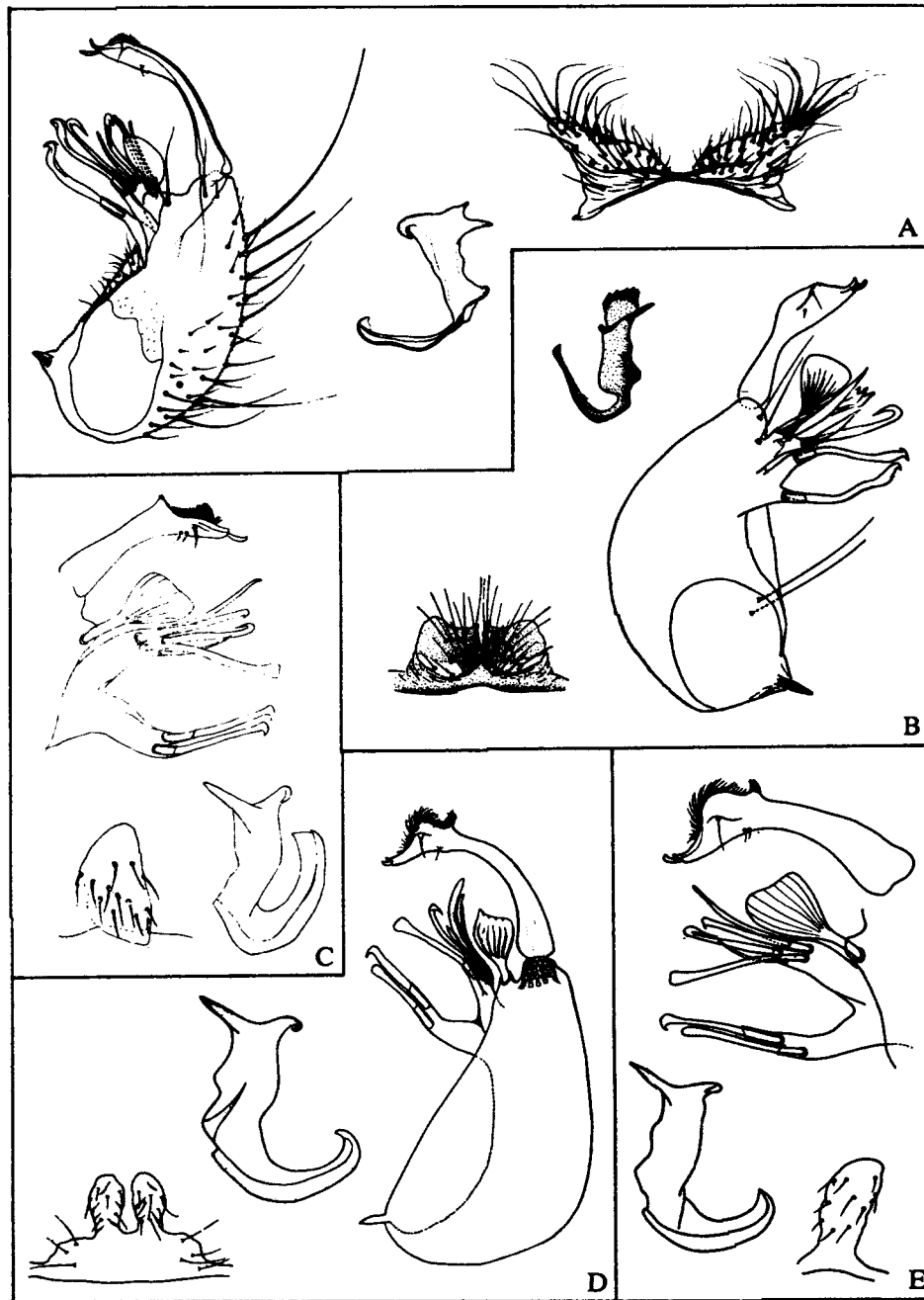


Fig. 59. A,B, *Culex iolambdis*: A, Cova Garcia, Sutil and Rausseo 1966a; B, Lane 1953. C, *Culex isabelae*: Duret 1968e. D, *Culex jocasta*: Komp and Rozeboom 1951.



**Fig. 60.** A, *Culex johnsoni*: Galindo and Mendez 1961. B, *Culex johanyi*: Duret 1968d. C-E, *Culex jubifer*: C, Cova Garcia, Sutil and Rausseo 1966a; D, Komp and Brown 1935; E, Rozeboom and Komp 1950.

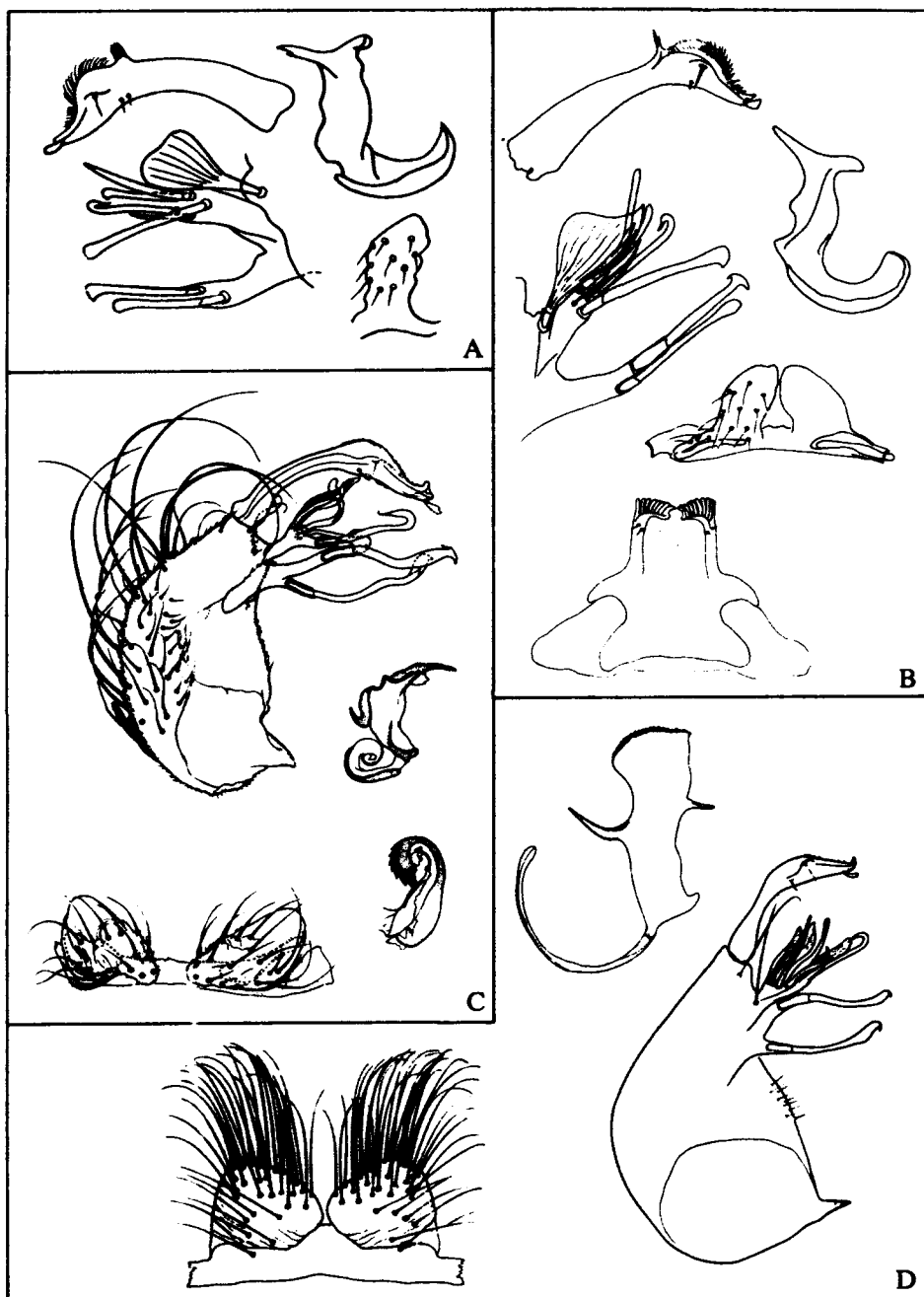


Fig. 61. A,B, *Culex jubifer*: A, Lane 1953; B, Sirivanakarn 1983. C, *Culex keenani*: Galindo and Mendez 1961. D, *Culex kummi*: Komp and Rozeboom 1951.

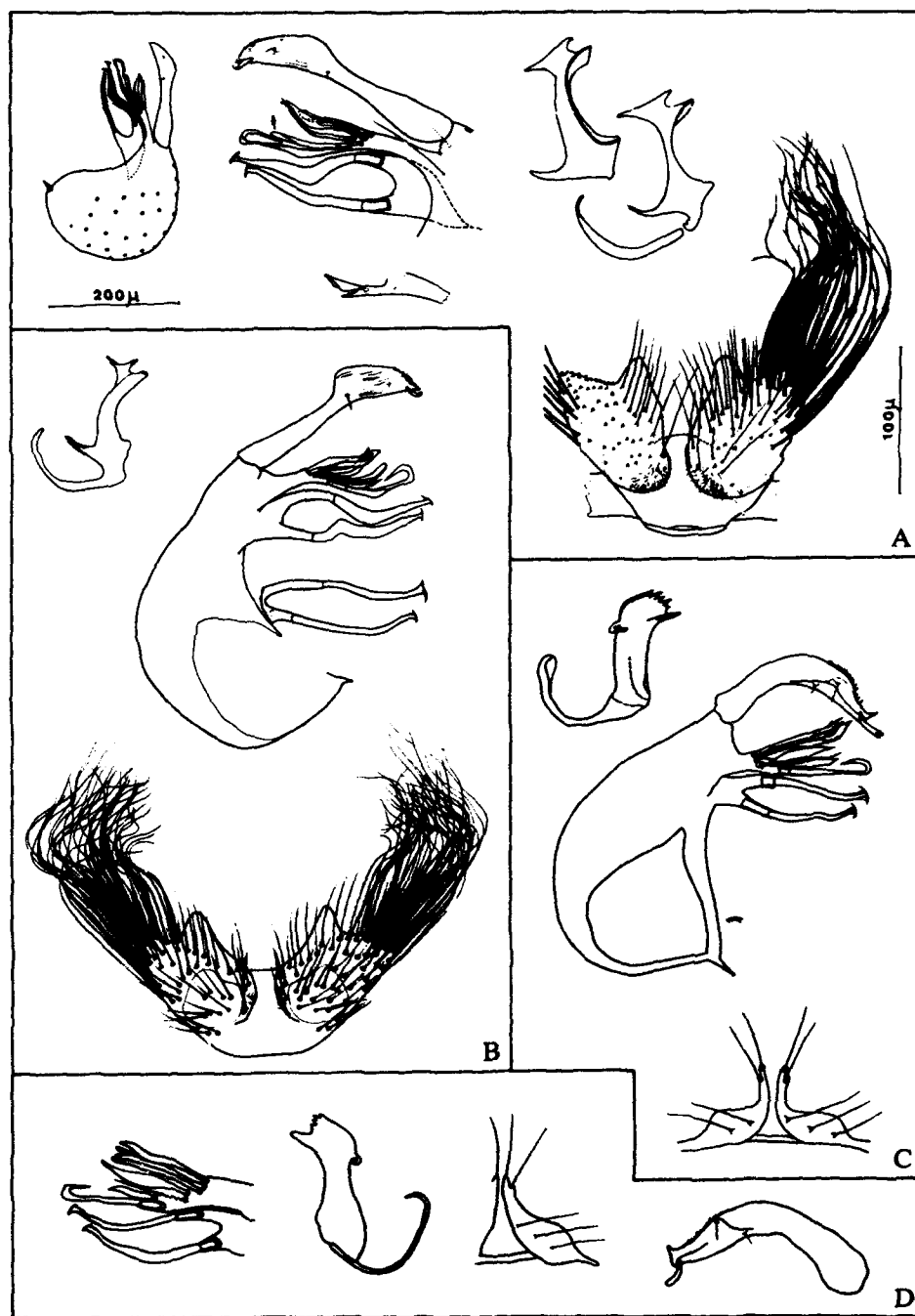


Fig. 62. A,B, *Culex lacertus*: A, Clastrier 1972; B, Komp and Rozeboom 1951.  
C,D, *Culex limacifer*: C, Komp 1936b; D, Lane 1953.

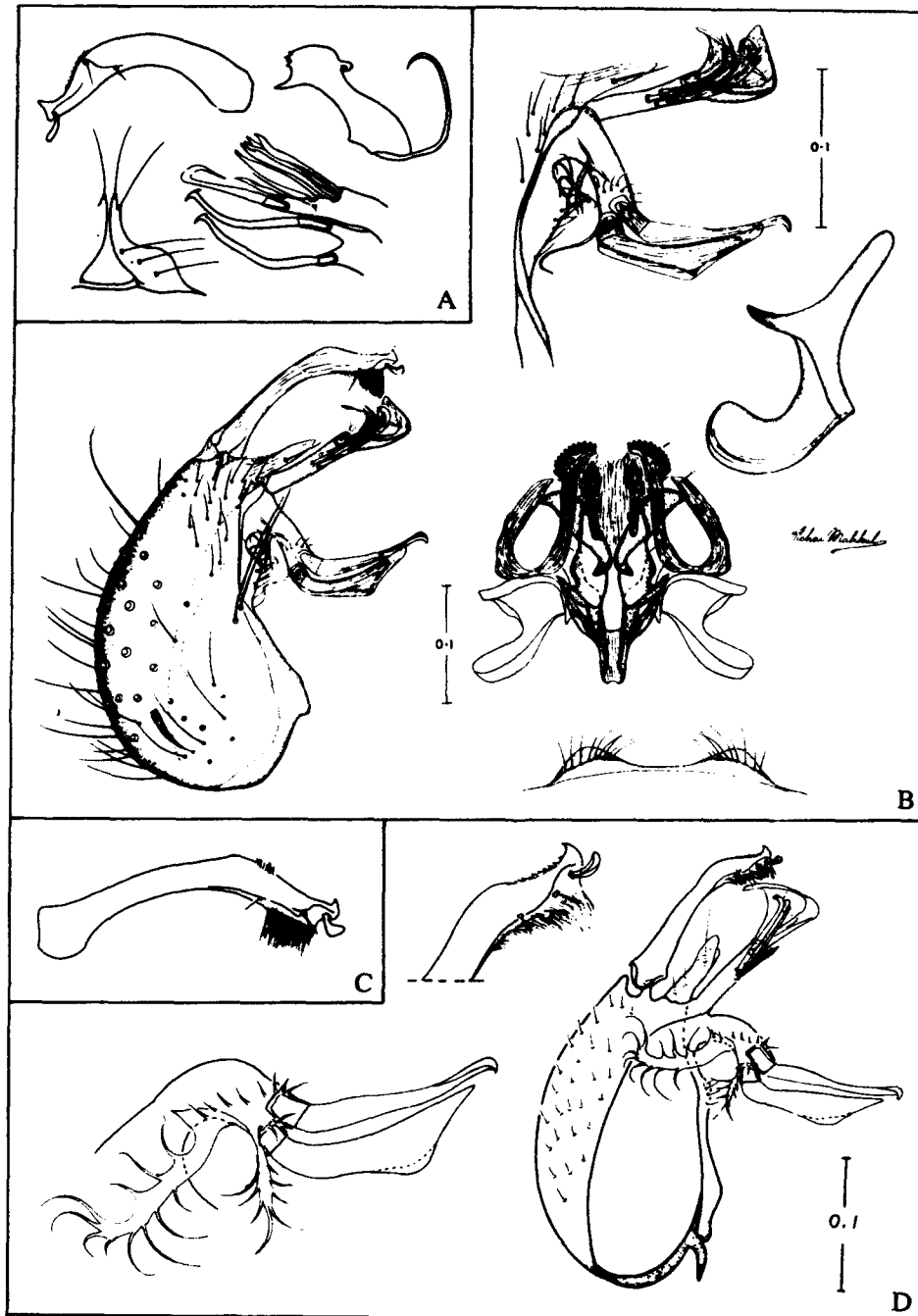


Fig. 63. A, *Culex limacifer*: Rozeboom and Komp 1950. B-D, *Culex lopesi*: B, Sirivanakarn and Jakob 1979; C, Sirivanakarn 1983; D, Forattini and Sallum 1990.

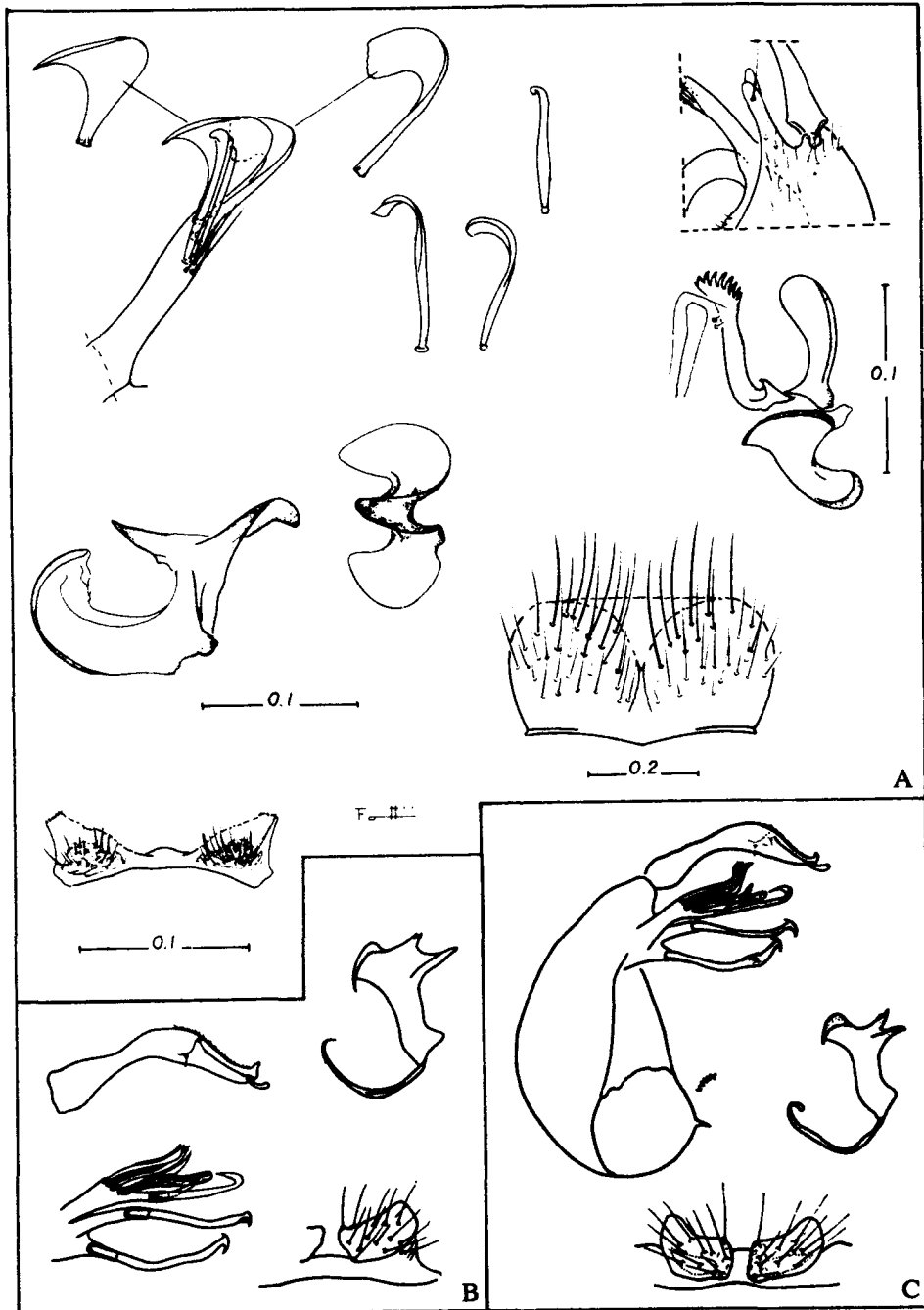


Fig. 64. A, *Culex lopezi*: Forattini and Sallum 1990. B,C, *Culex lucifugus*: B, Rozeboom and Komp 1950; C, Komp 1936b.

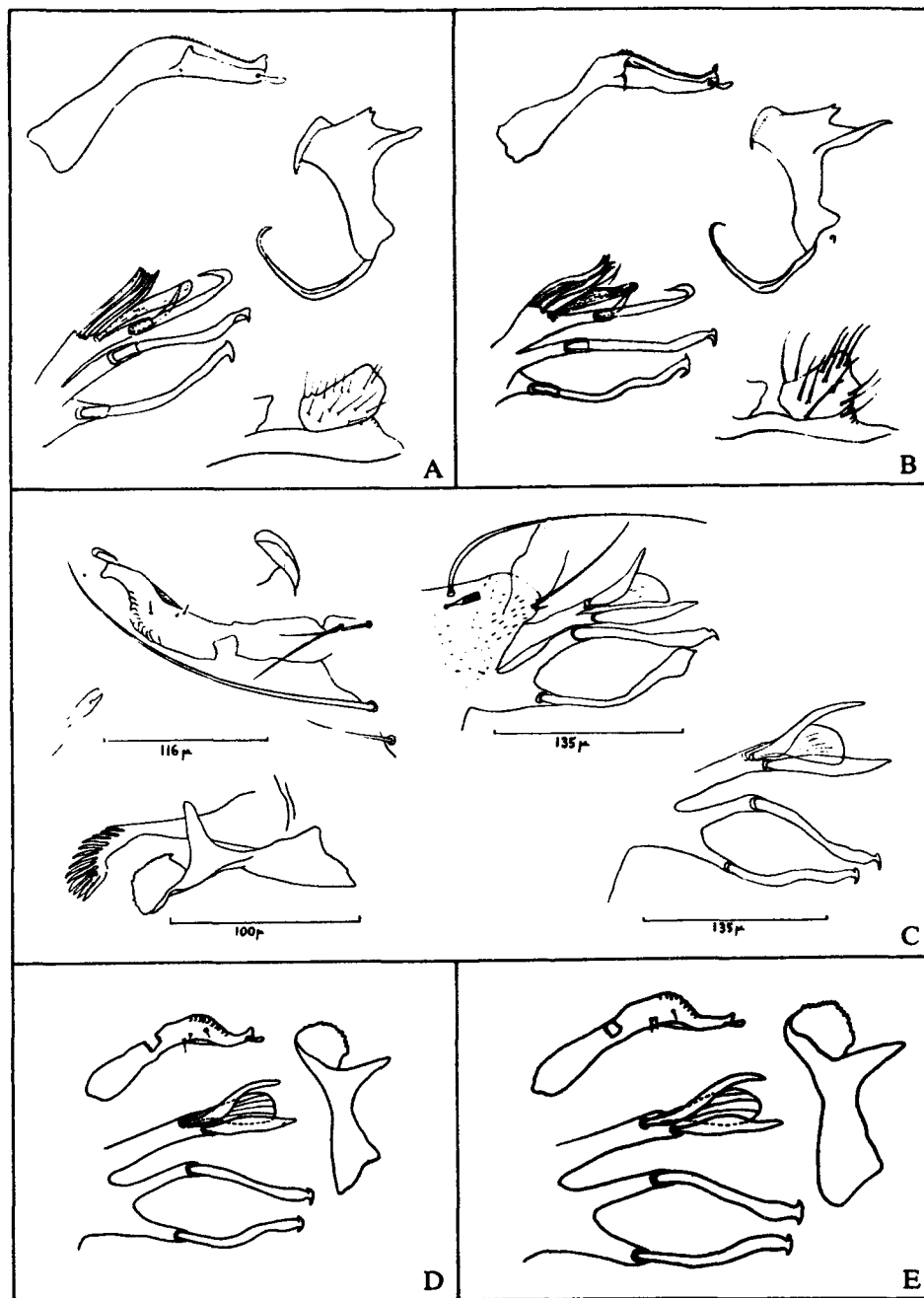


Fig. 65. A,B, *Culex lucifugus*: A, Lane 1953; B, Cova Garcia, Sutil and Rausseo 1966a. C-E, *Culex madininensis*: C, Senevet 1936; D, Rozeboom and Komp 1950; E, Lane 1953.

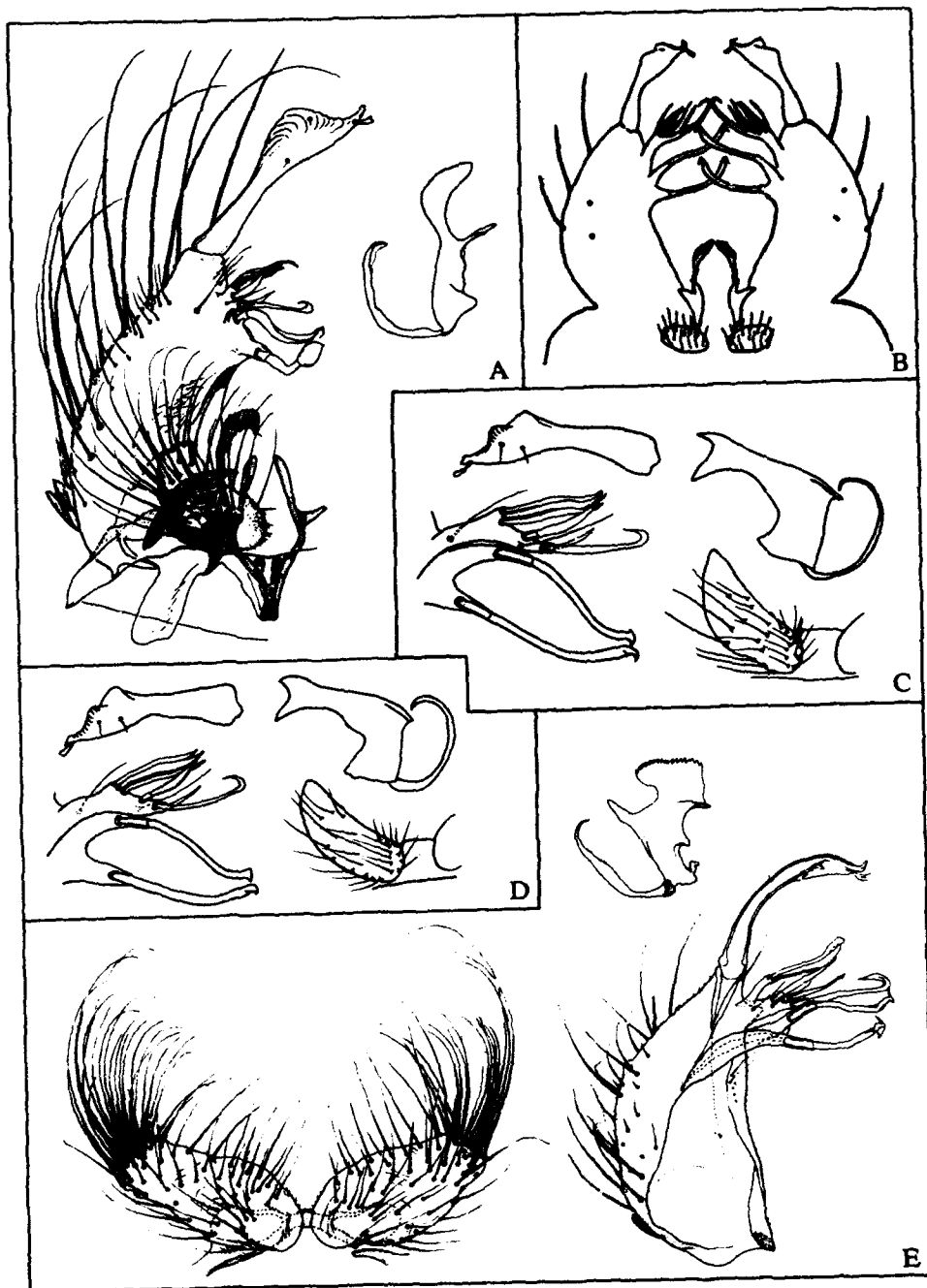


Fig. 66. A, *Culex martinezi*: Casal and Garcia 1968a. B-D, *Culex maxinocca*: B, Dyar 1928; C, Rozeboom and Komp 1950; D, Lane 1953. E, *Culex mesodenticulatus*: Galindo and Mendez 1961.



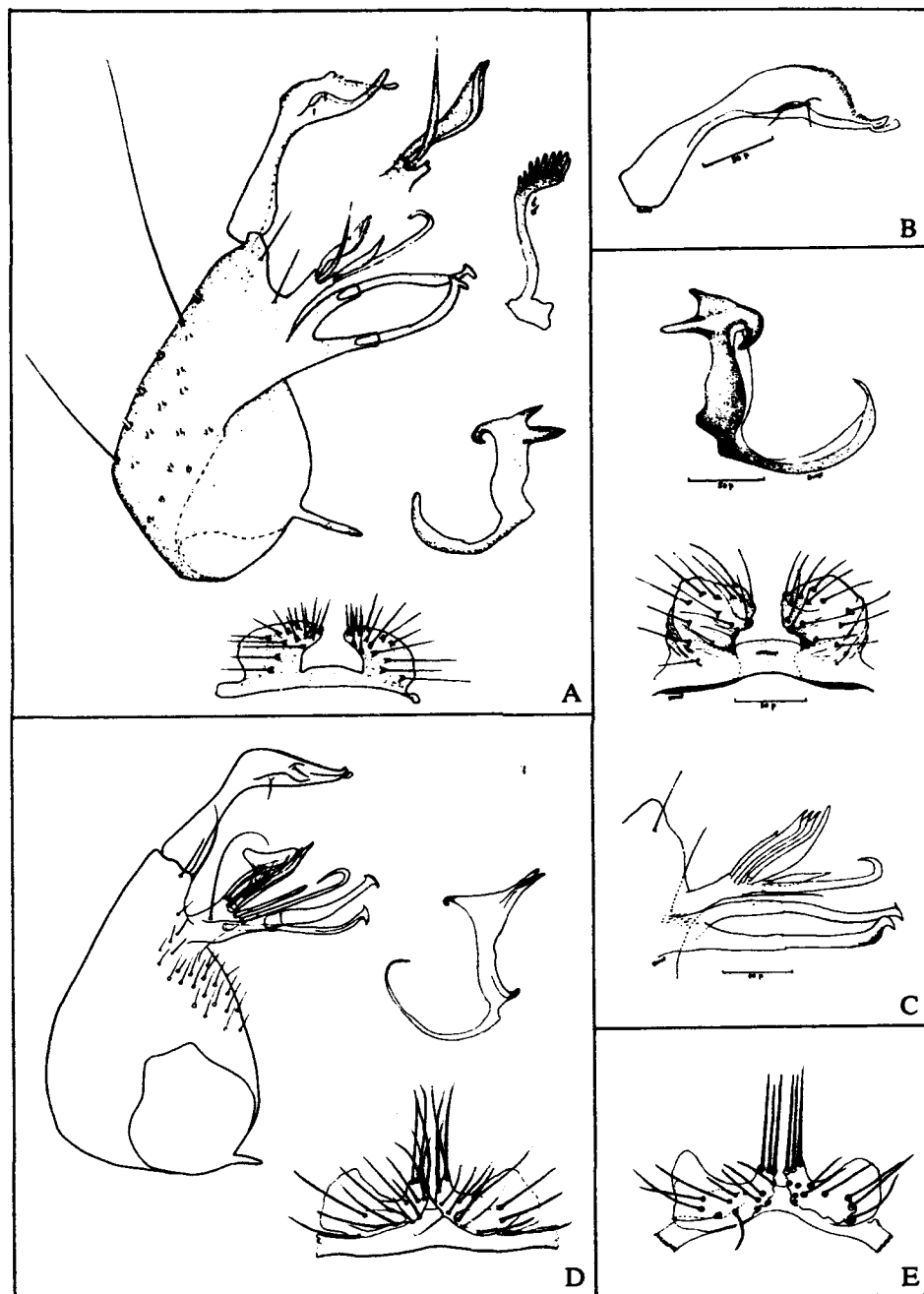


Fig. 67. A, *Culex milwardi*: Xavier and da Silva Mattos 1972. B,C, *Culex misionensis*: B, Duret 1953; C, Duret 1954. D,E, *Culex mistura*: D, Komp and Rozeboom 1951; E, Sirivanakarn 1983.

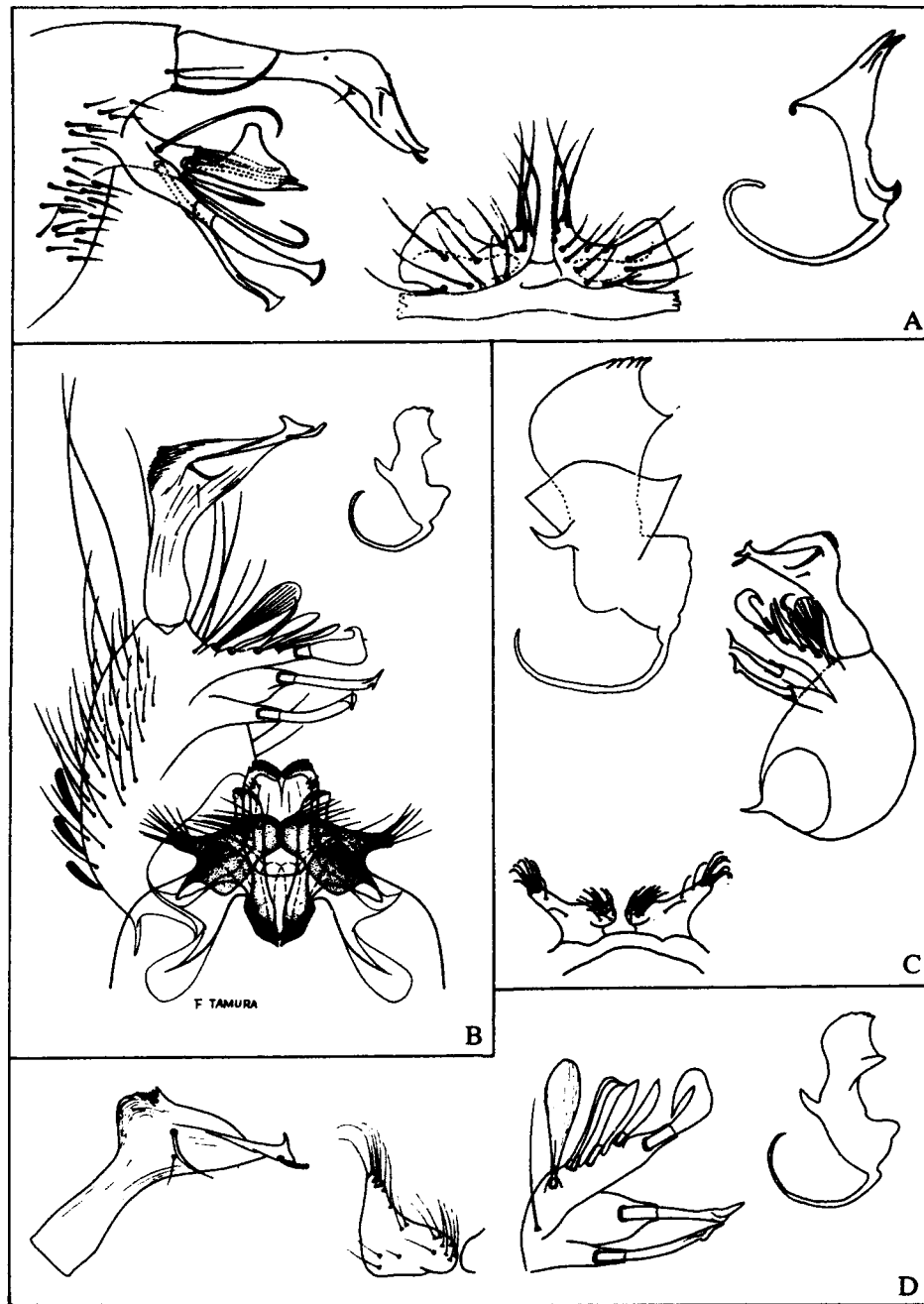


Fig. 68. A, *Culex mistura*: Cova Garcia, Sutil and Rausseo 1966a. B-D, *Culex mulrennani*: B, Carpenter and LaCasse 1955; C, Basham 1948; D, Rozeboom and Komp 1950.

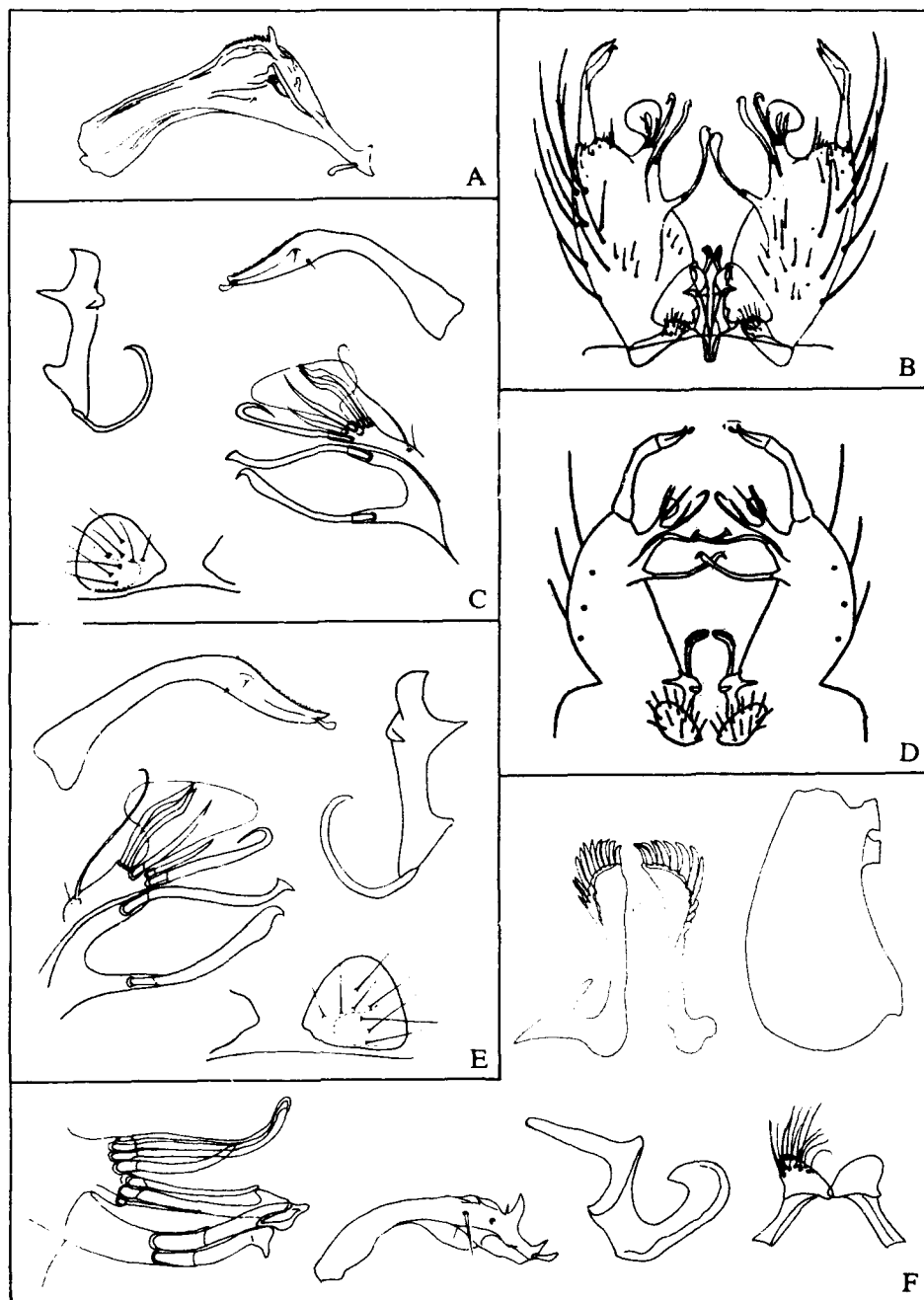


Fig. 69. A, *Culex mulrennani*: Sirivanakarn 1983. B-E, *Culex mutator*: B, Howard, Dyar and Knab 1913; C, Rozeboom and Komp 1950; D, Dyar 1928; E, Lane 1953. F, *Culex nicaroensis*: Sirivanakarn 1983.

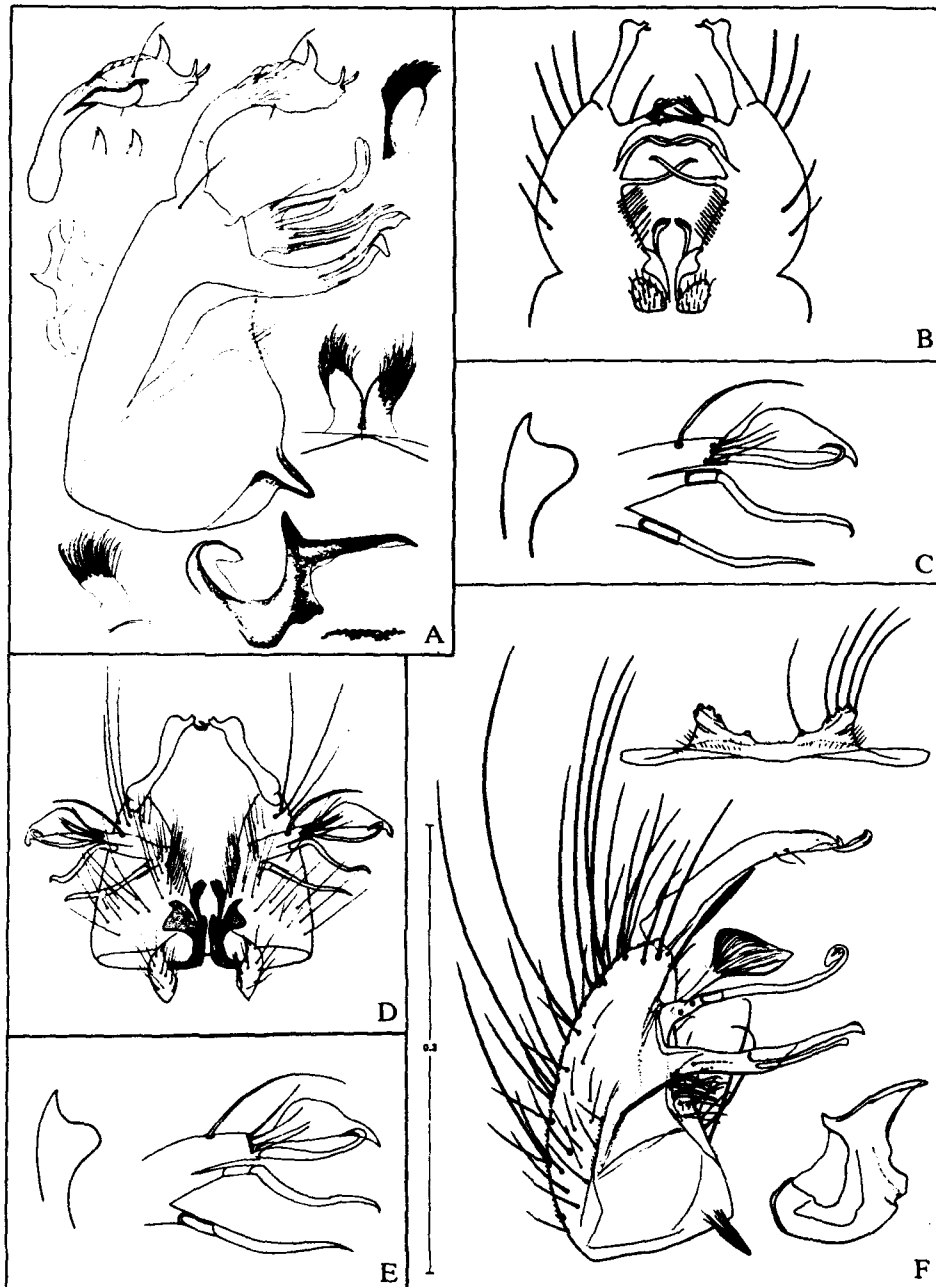


Fig. 70. A, *Culex nicaroensis*: Duret 1967. B-E, *Culex nicceriensis*: B, Dyar 1928; C, Rozeboom and Komp 1950; D, Bonne and Bonne-Wepster 1925; E, Cova Garcia, Sutil and Rausseo 1966a. F, *Culex ocosa*: Belkin, Heinemann and Page 1970.

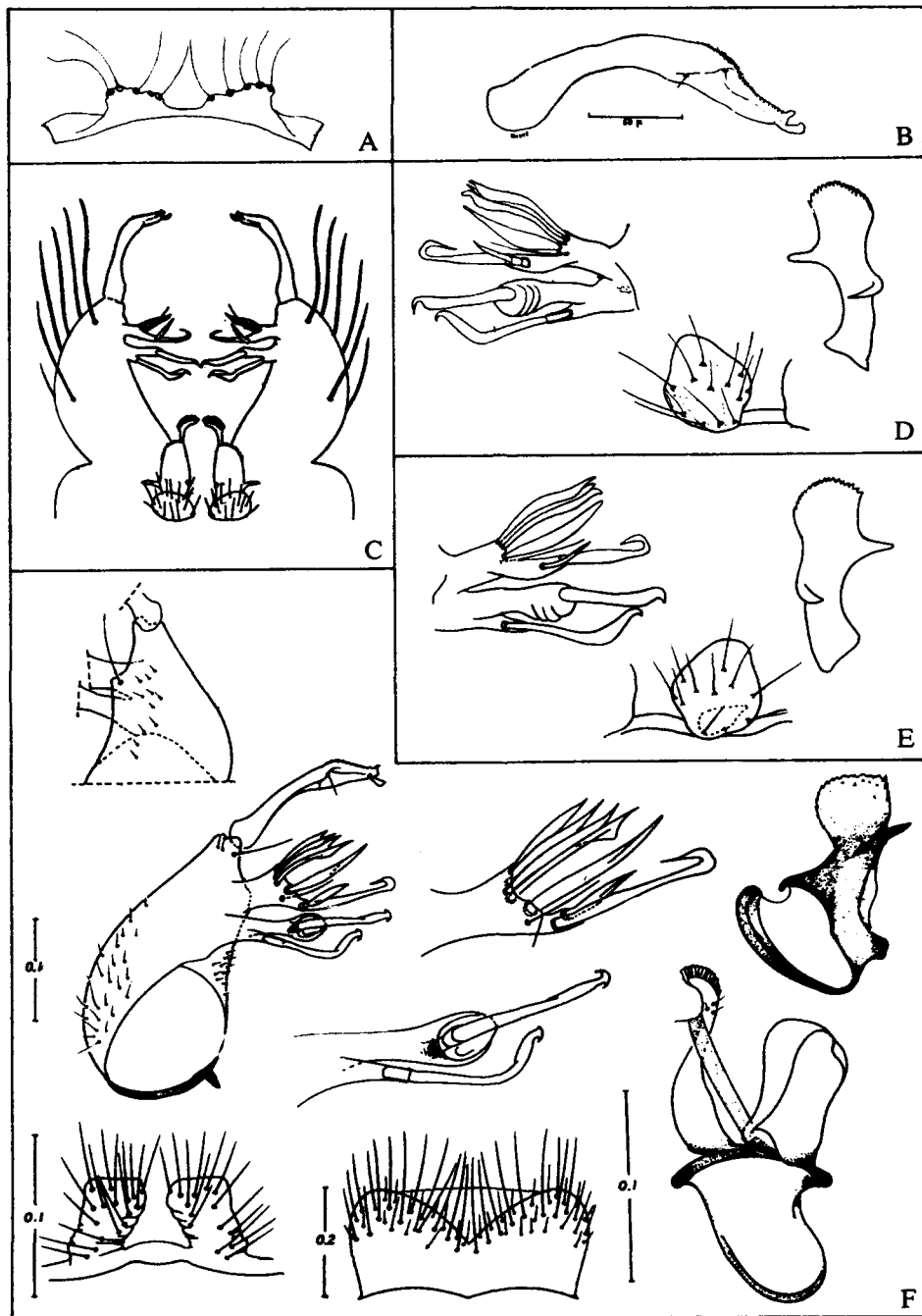


Fig. 71. A. *Culex ocossa*: Duret 1953. B-F, *Culex oedipus*: B, Sirivanakarn 1983; C, Dyar 1928 (as *phlogistus*); D, Rozeboom and Komp 1950; E, Lane 1953; F, Forattini and Sallum 1987a.

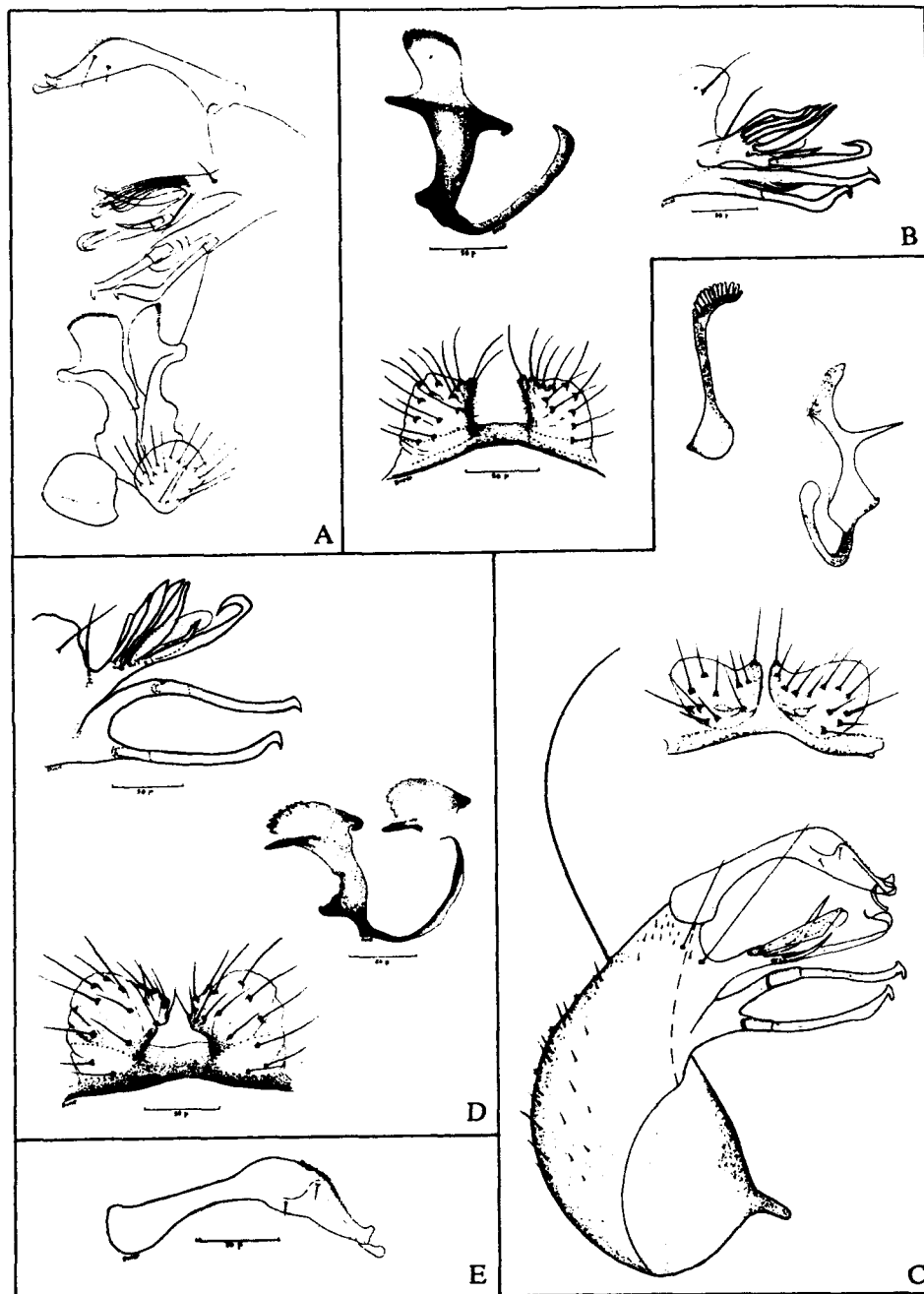


Fig. 72. A,B, *Culex oedipus*: A, Root 1927b; B, Duret 1954. C, *Culex olimpioi*: Xavier, da Silva and da Silva Mattos 1970. D,E, *Culex orfilai*: D, Duret 1954; E, Duret 1953.

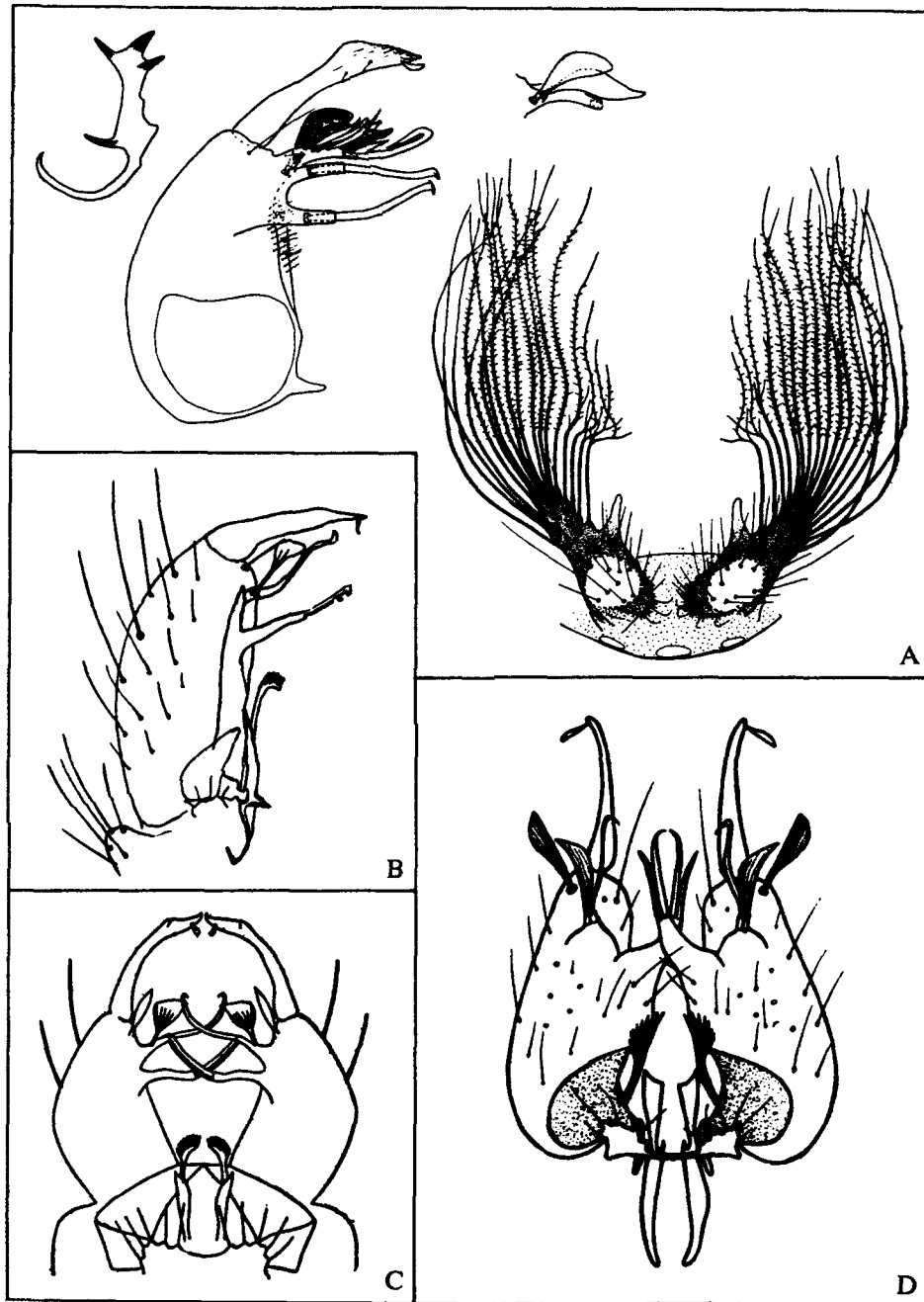


Fig. 73. A, *Culex palaciosi*: Duret 1968d. B-D, *Culex panocossa*: B, Dyar 1923d (as *aikenii*); C, Dyar 1928 (as *aikenii*); D, Bonne and Bonne-Wepster 1925 (as *aikenii*).

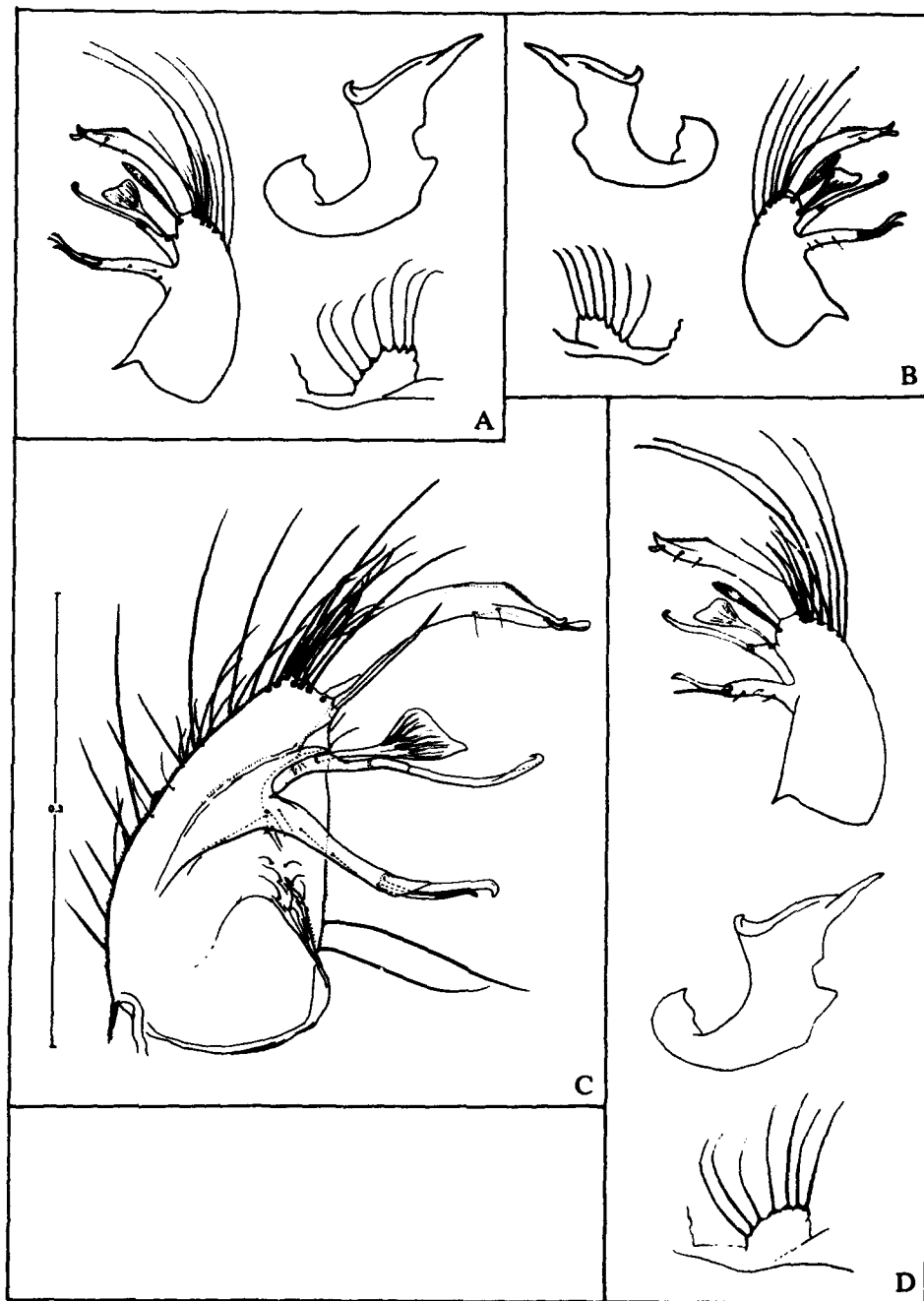


Fig. 74. *Culex panocossa*: A, Rozeboom and Komp 1950 (as *aikenii*); B, Lane 1953 (as *aikenii*); C, Belkin, Heinemann and Page 1970; D, Cova Garcia, Sutil and Rausseo 1966a (as *aikenii*).



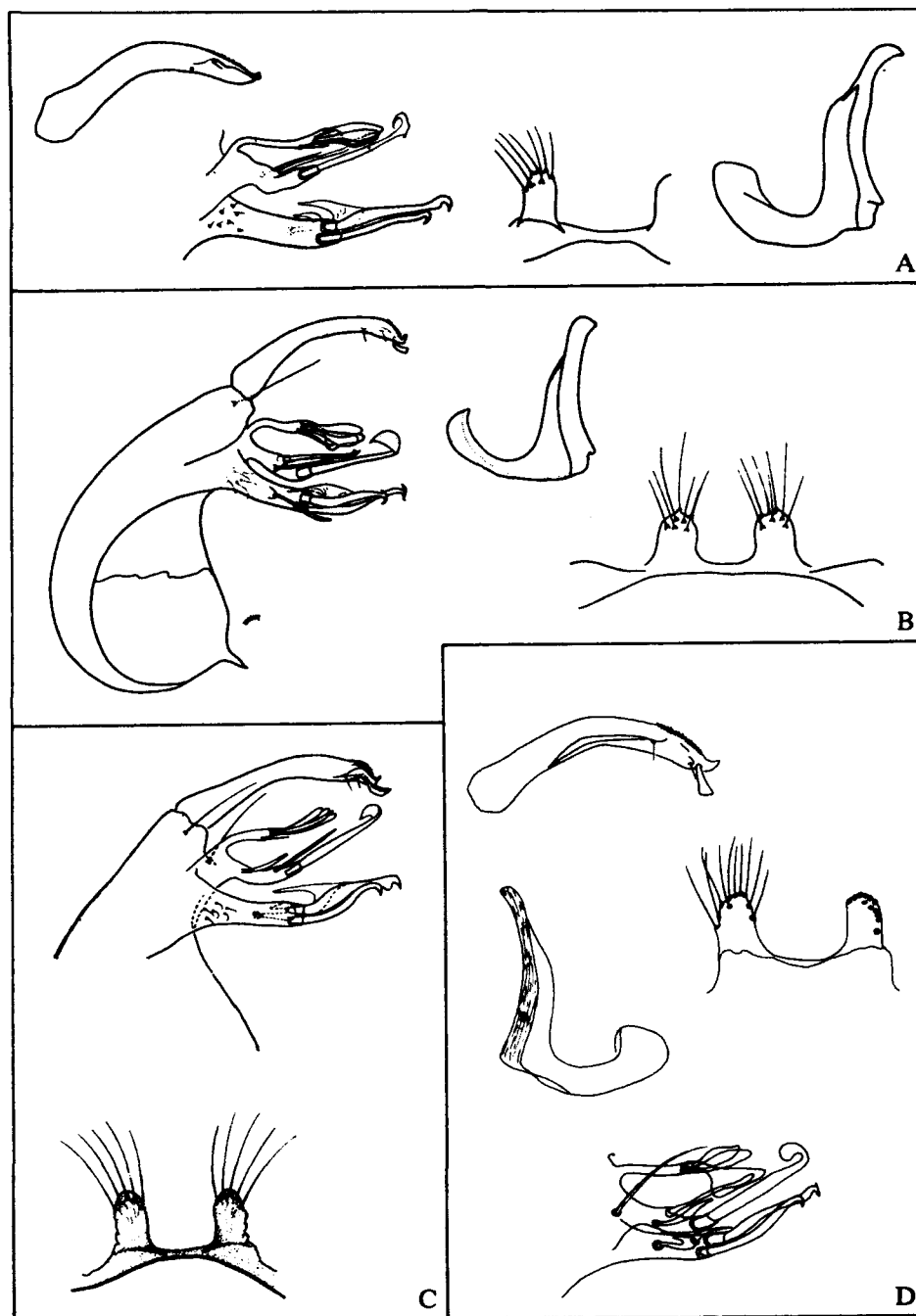


Fig. 75. *Culex paracrybda*: A, Rozeboom and Komp 1950; B, Komp 1936b; C, Duret 1969a; D, Sirivanakarn 1983.

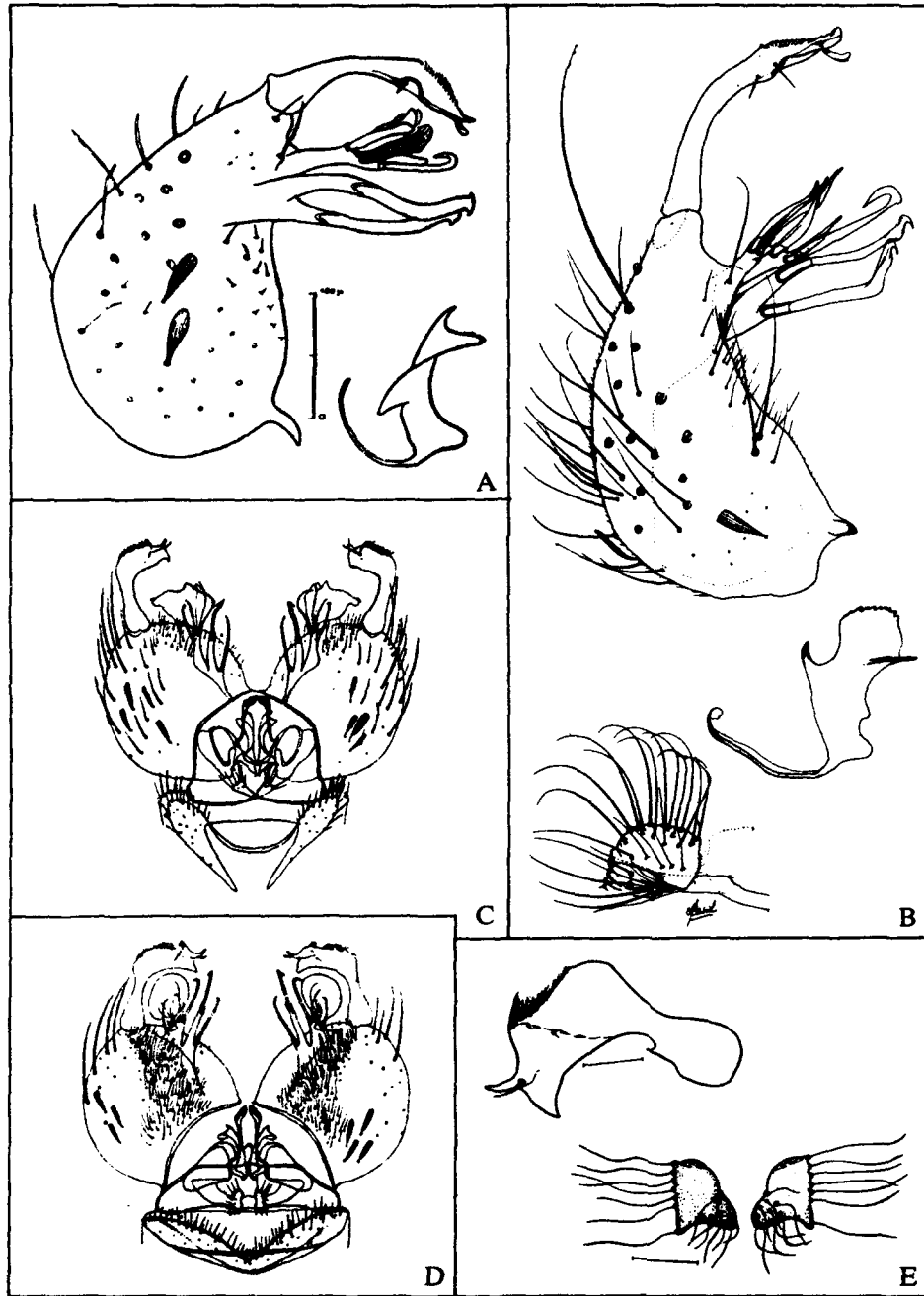


Fig. 76. A, *Culex patientiae*: Floch and Fauran 1955. B, *Culex pavlovskiyi*: Casal and Garcia 1967. C-E, *Culex peccator*: C, Howard, Dyar and Knab 1913 (as *incriminator*); D, Howard, Dyar and Knab 1913; E, Wirth 1945.

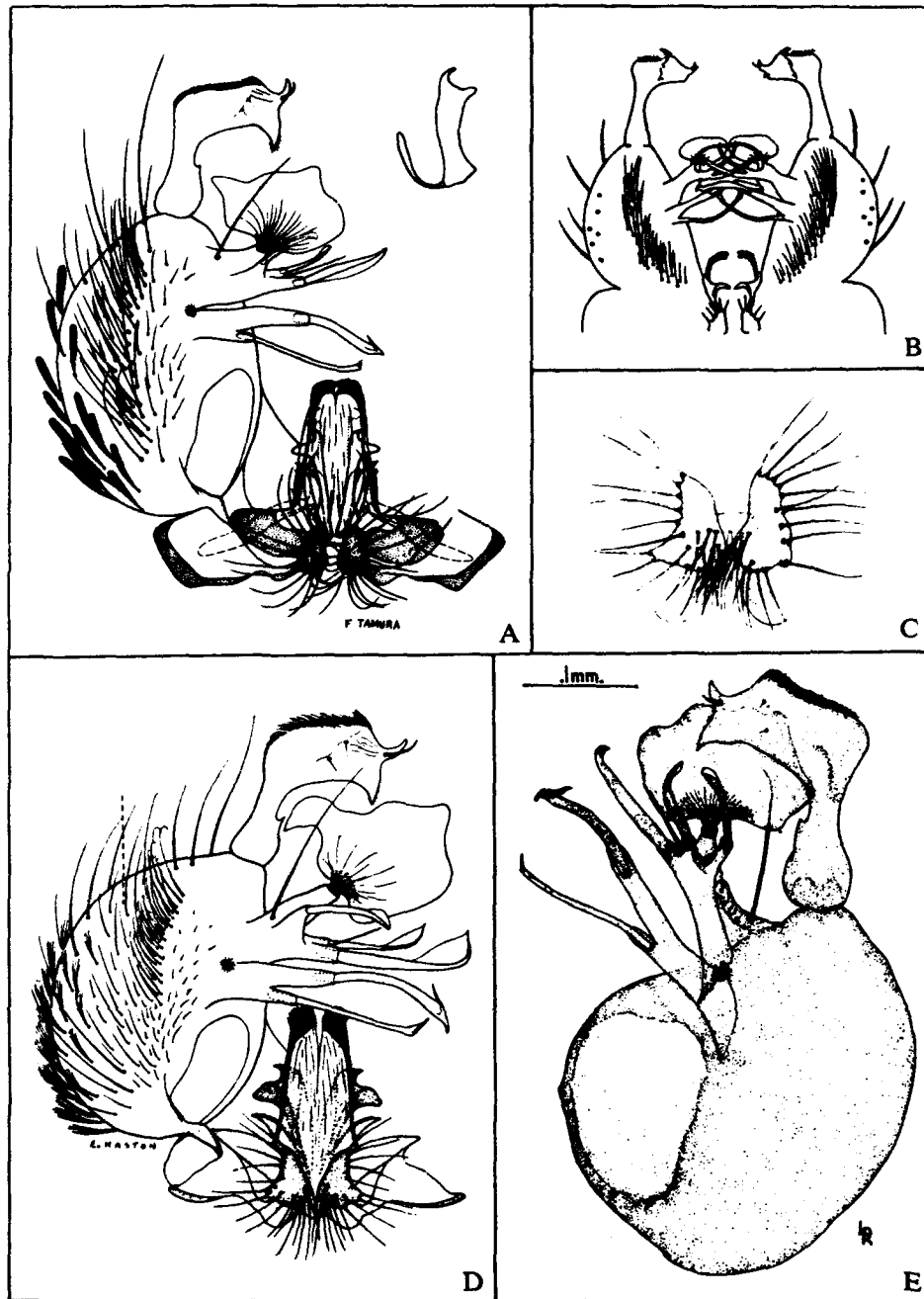


Fig. 77. *Culex peccator*: A, Carpenter and LaCasse 1955; B, Dyar 1928; C, Roth and Young 1944; D, Carpenter, Middlekauff and Chamberlain 1946; E, Roth 1943.

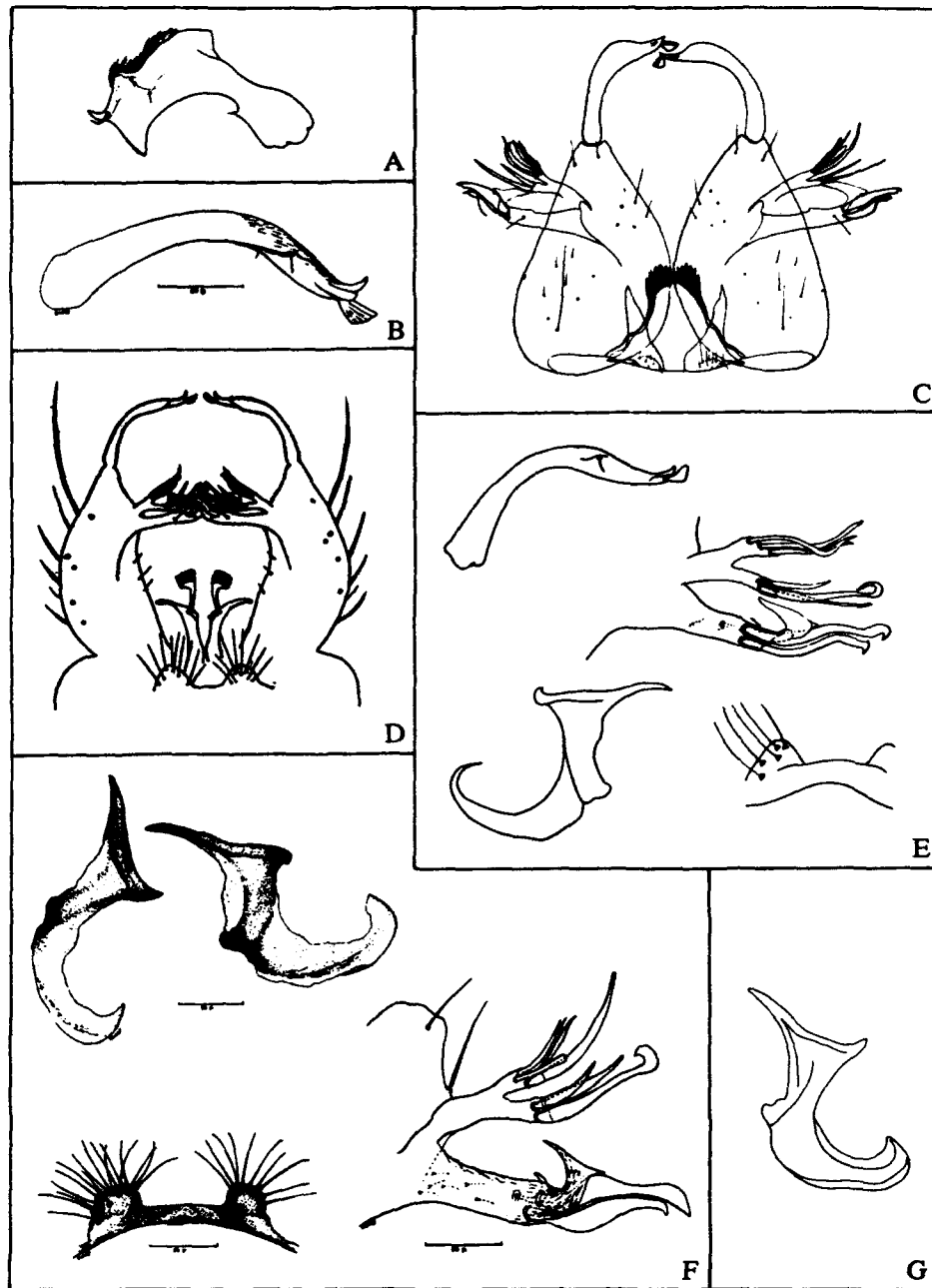


Fig. 78. A, *Culex peccator*: Rozeboom and Komp 1950. B-G, *Culex pedroi*: B, Duret 1953 (as *taeniopus*); C, Bonne and Bonne-Wepster 1925 (as *taeniopus*); D, Dyar 1928 (as *taeniopus*); E, Rozeboom and Komp 1950 (as *taeniopus*); F, Duret 1954 (as *taeniopus*); G, Sirivanakarn 1983.

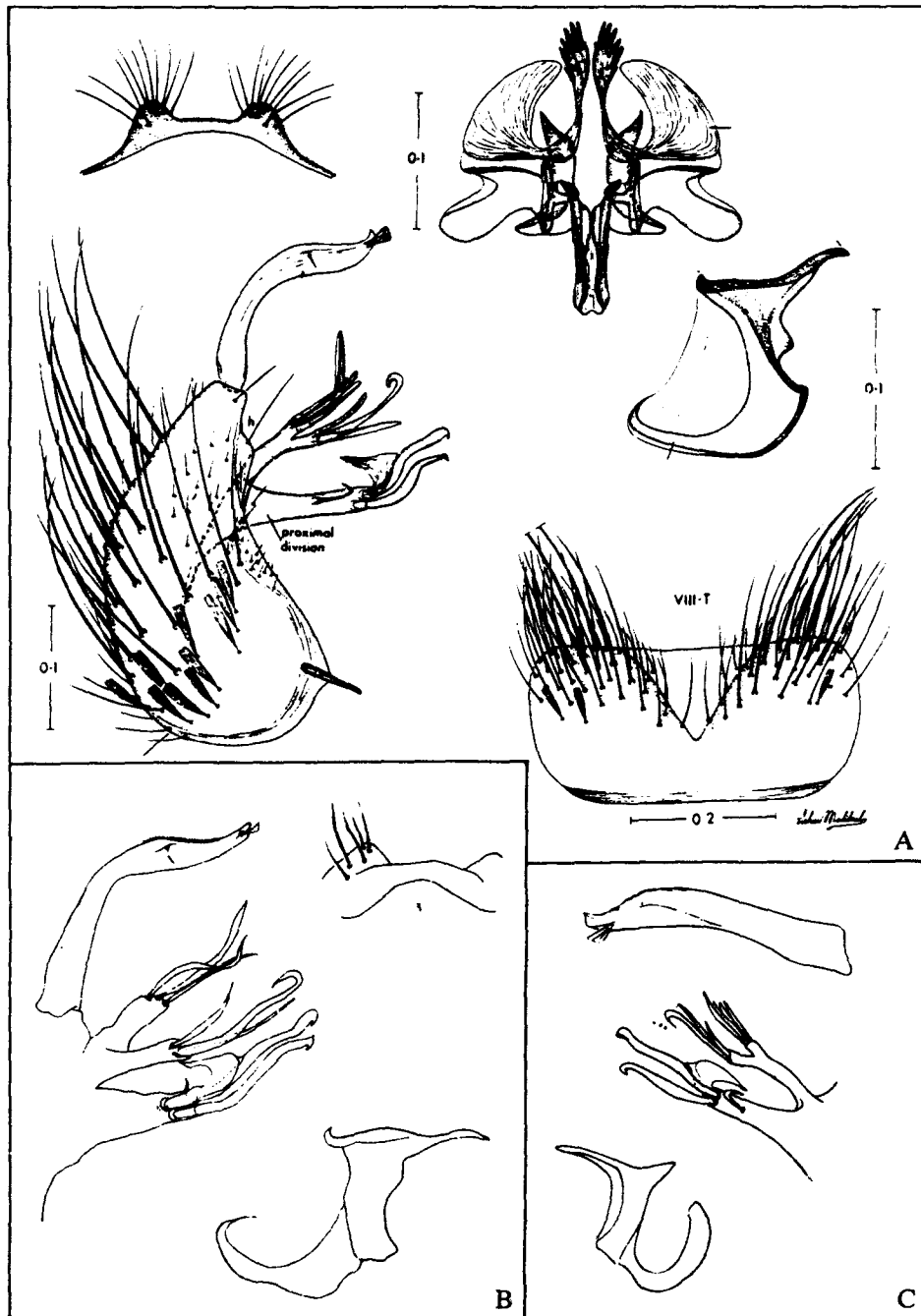


Fig. 79. *Culex pedroi*: A, Sirivanakarn and Belkin 1980; B, Cova Garcia, Sutil and Rausseo 1966a (as *taeniopus*); C, Forattini 1965 (as *taeniopus*).

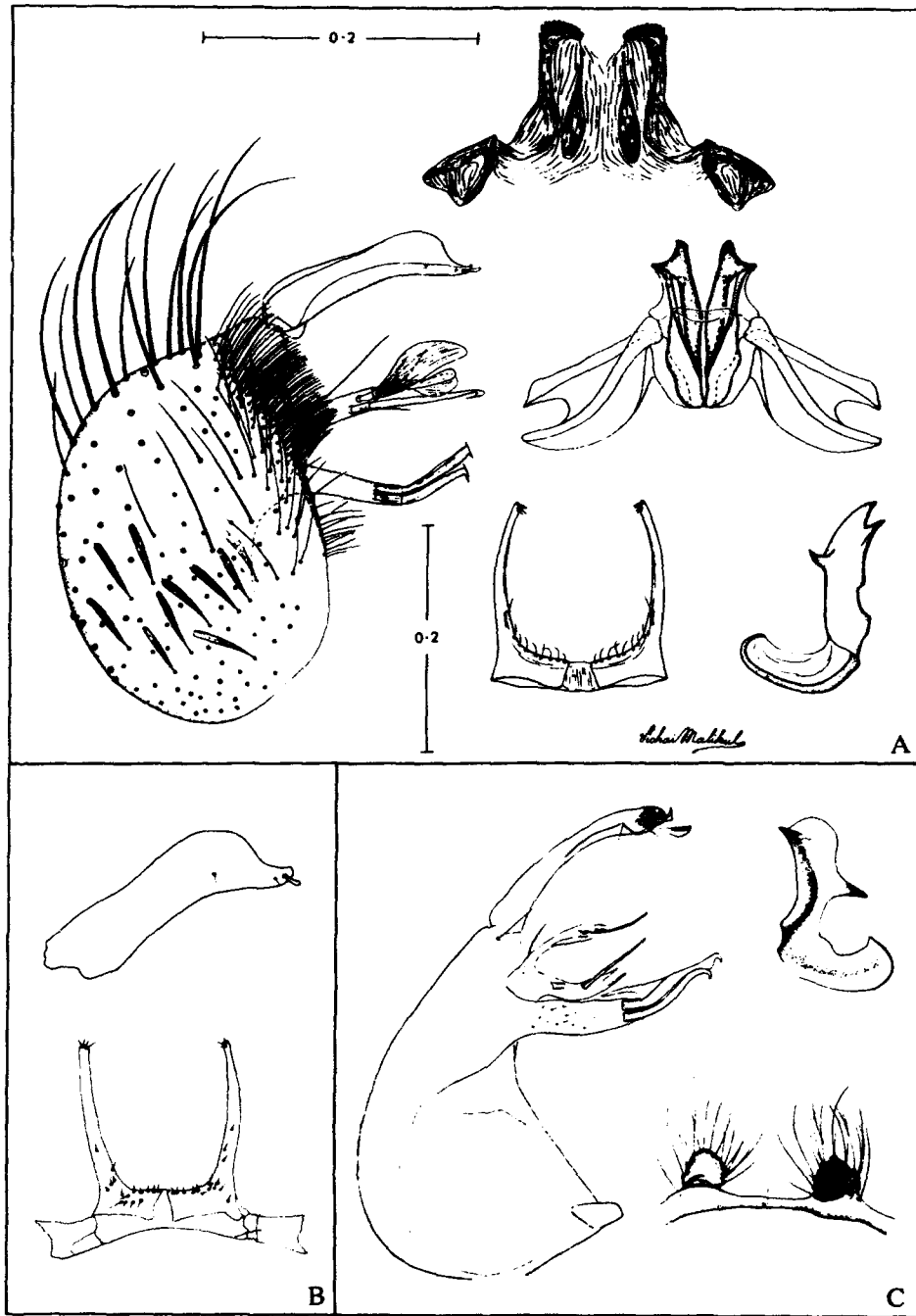


Fig. 80. A,B, *Culex penai*: A, Sirivanakarn 1979; B, Sirivanakarn 1983. C, *Culex pereyrai*: Duret 1967.

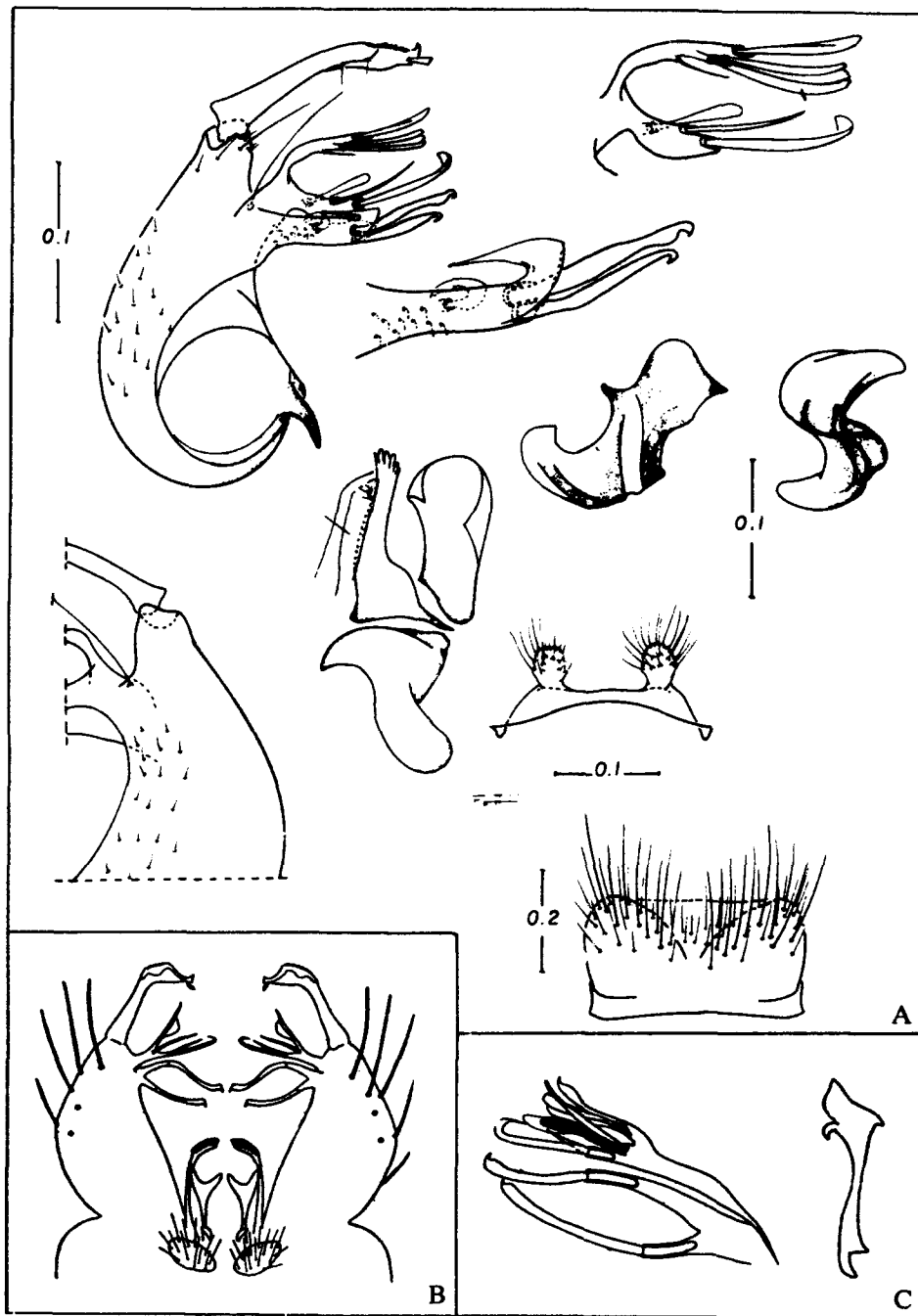


Fig. 81. A, *Culex pereyrai*: Forattini and Sallum 1989b. B, C, *Culex phlabistus*: B, Dyar 1928; C, Rozeboom and Komp 1950.

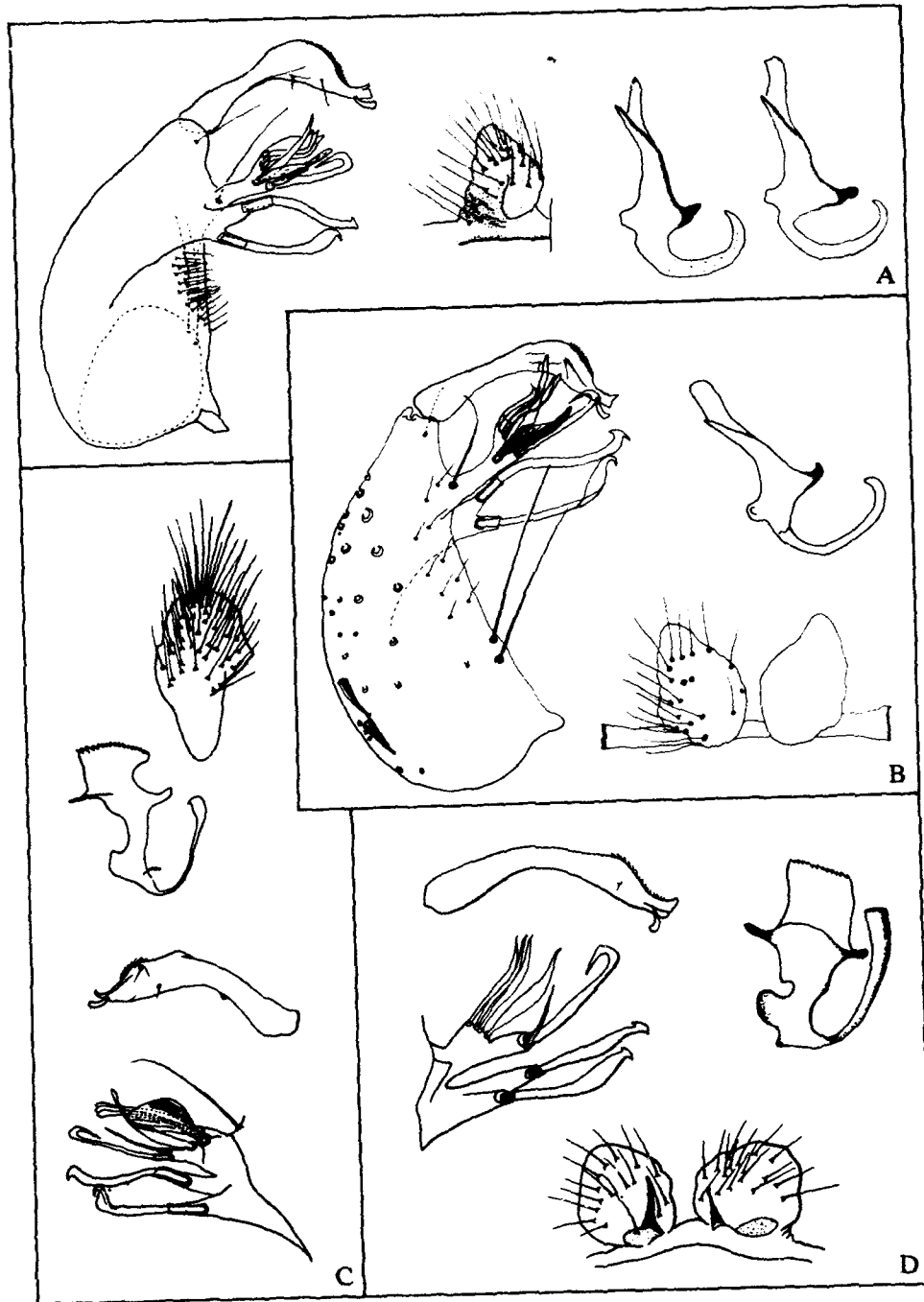


Fig. 82. A,B, *Culex phlabistus*: A, Duret 1968a (as *kerr*); B, Sirivanakarn 1983.  
C,D, *Culex phlogistus*: C, Rozeboom and Komp 1950; D, Lane 1953.



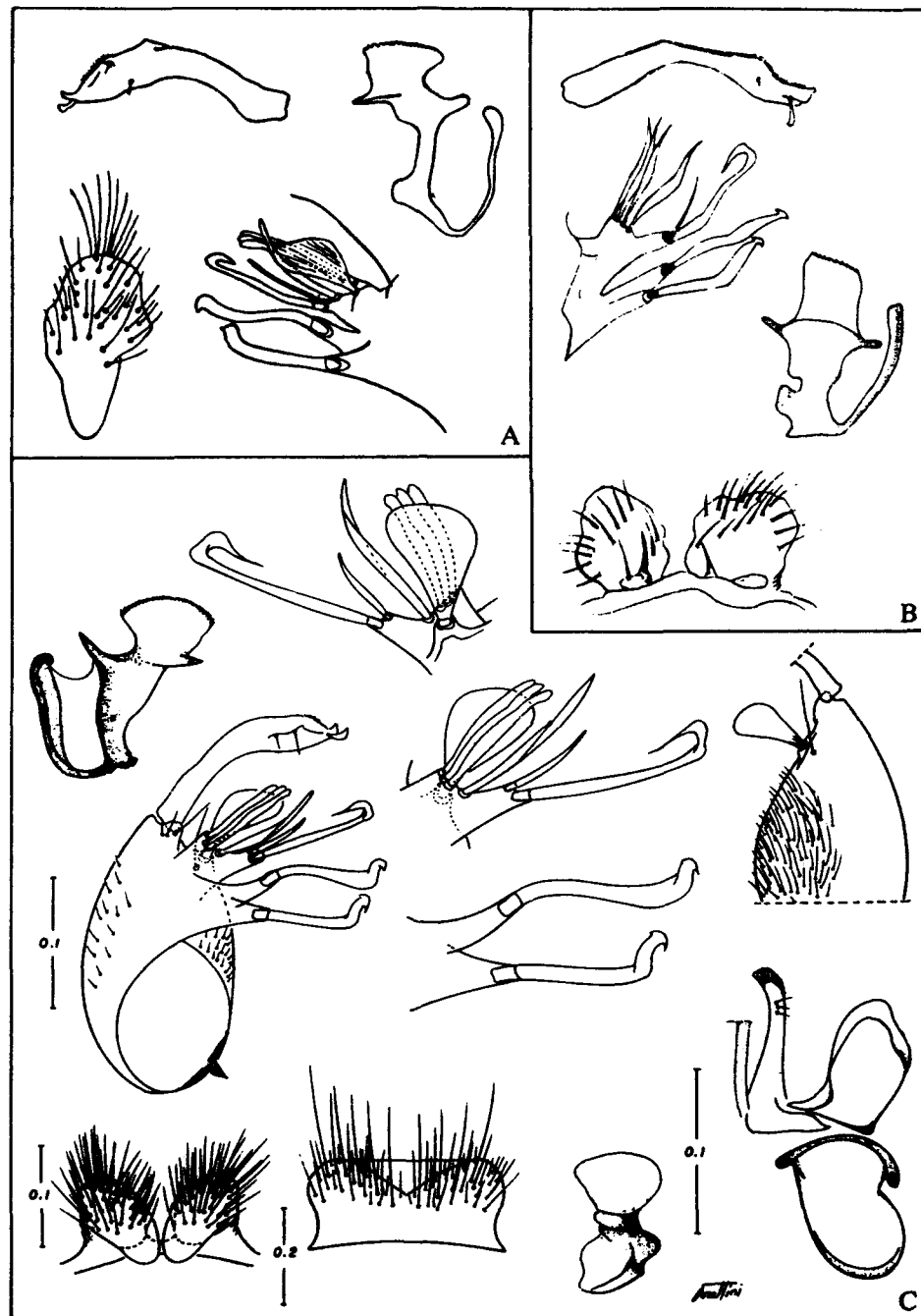


Fig. 83. *Culex phlogistus*: A, Floch and Fauran 1954; B, Cova Garcia, Sutil and Rausseo 1966a; C, Forattini and Sallum 1987a.

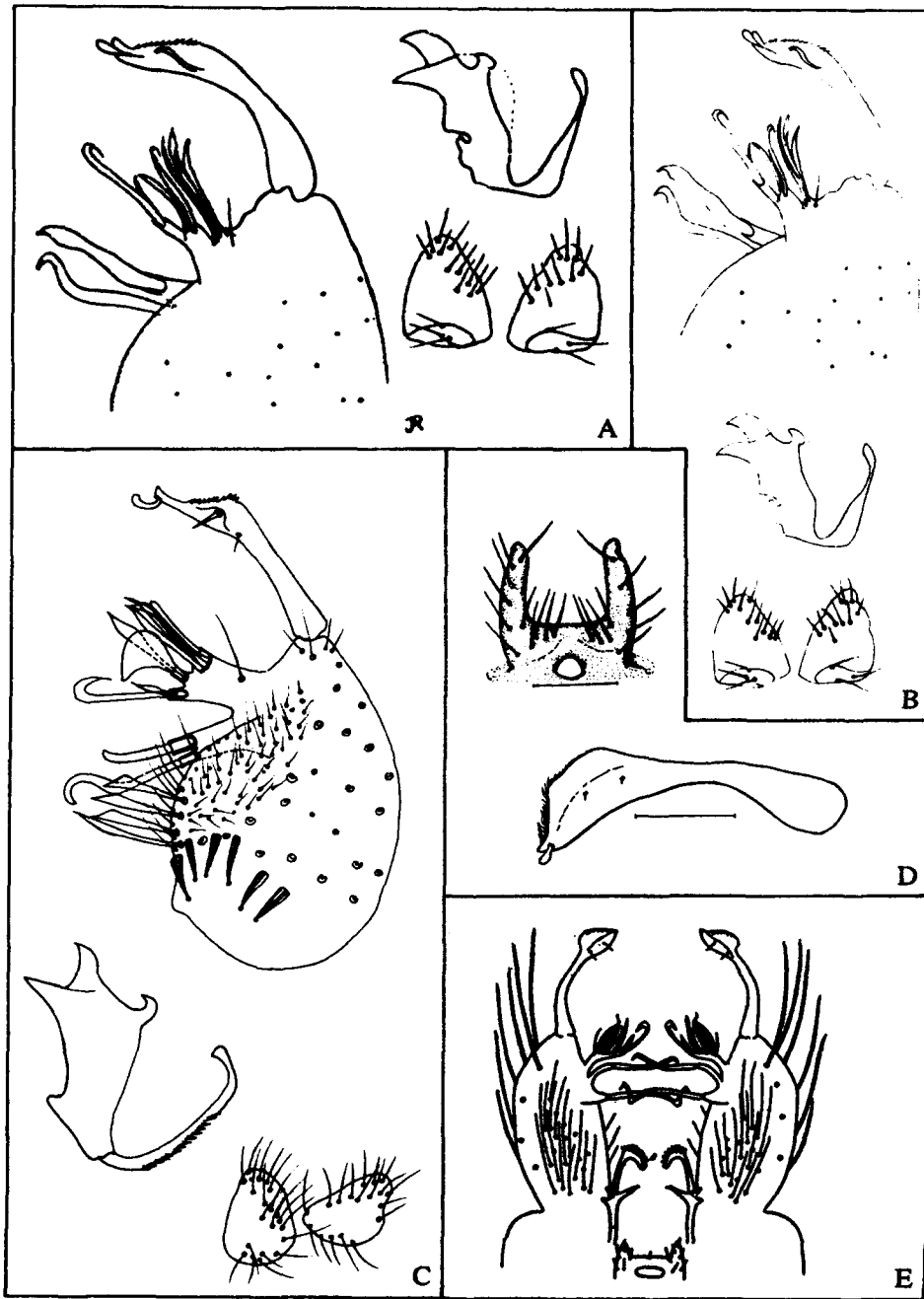


Fig. 84. A-C, *Culex pifanoi*: A, Anduze 1949a; B, Cova Garcia, Sutil and Rausseo 1966a; C, Sirivanakarn 1983. D,E, *Culex pilosus*: D, Wirth 1945; E, Dyar 1928.

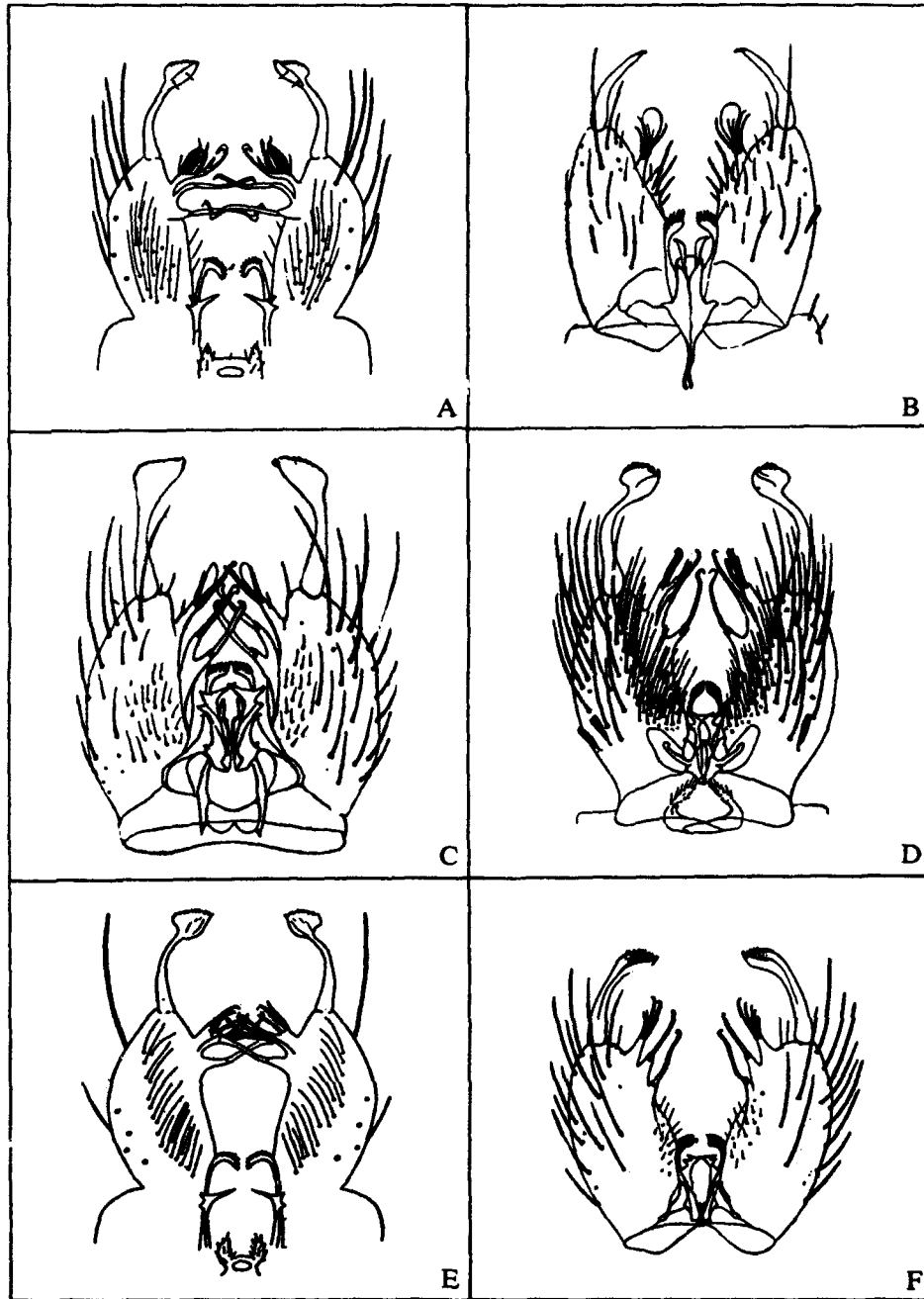


Fig. 85. *Culex pilosus*: A, Dyar 1928; B, Howard, Dyar and Knab 1913 (as *agitator*); C, Dyar 1928 (as *deceptor*); D, Dyar 1928 (as *hesitator*); E, Howard, Dyar and Knab 1913 (as *hesitator*); F, Howard, Dyar and Knab 1913 (as *mastigia*).

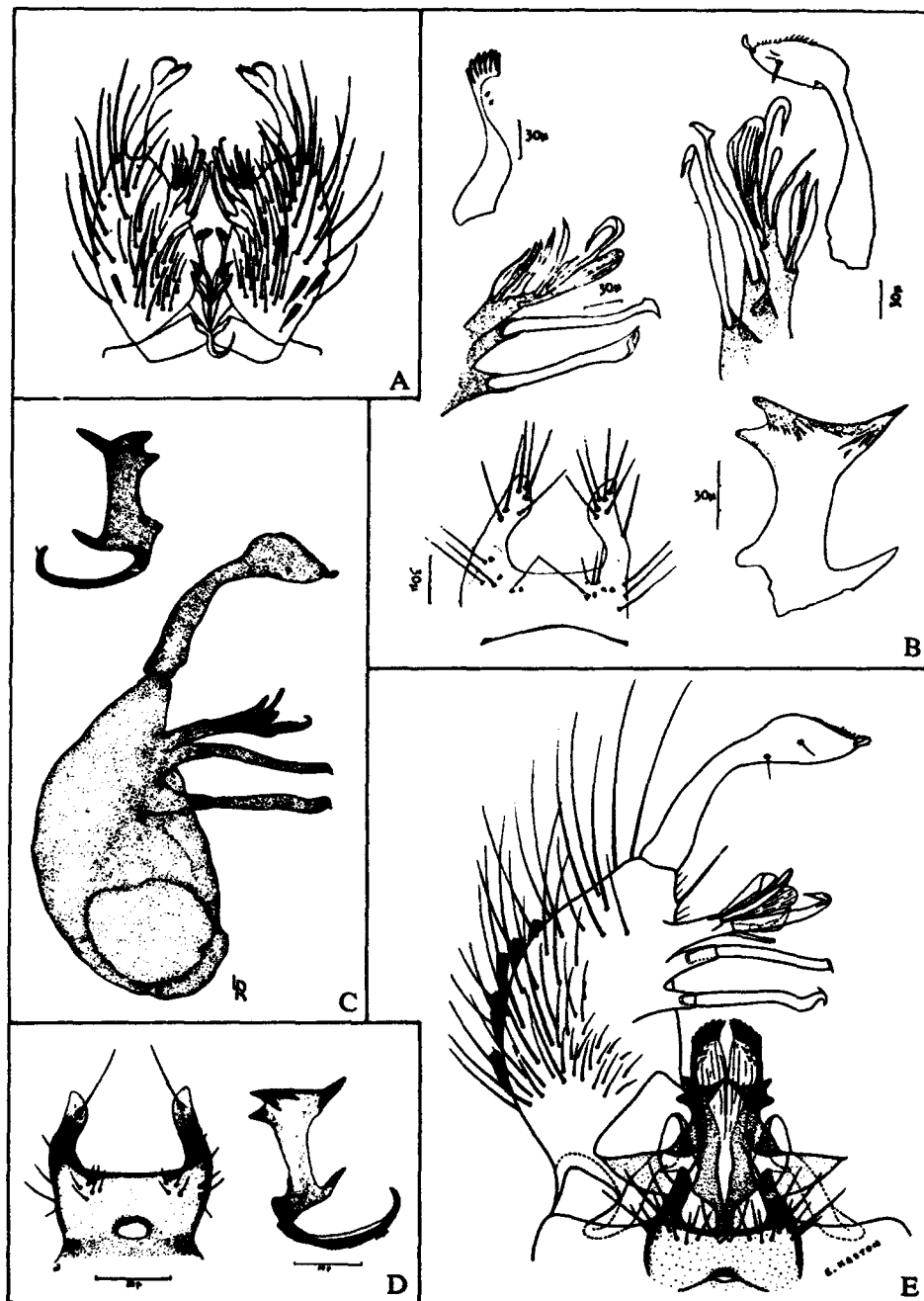


Fig. 86. *Culex pilosus*: A, Howard, Dyar and Knab 1913 (as *reductor*); B, Senevet and Abonnenc 1939 (as *radianus*); C, Roth 1943; D, Duret 1954; E, Carpenter, Middlekauff and Chamberlain 1946.

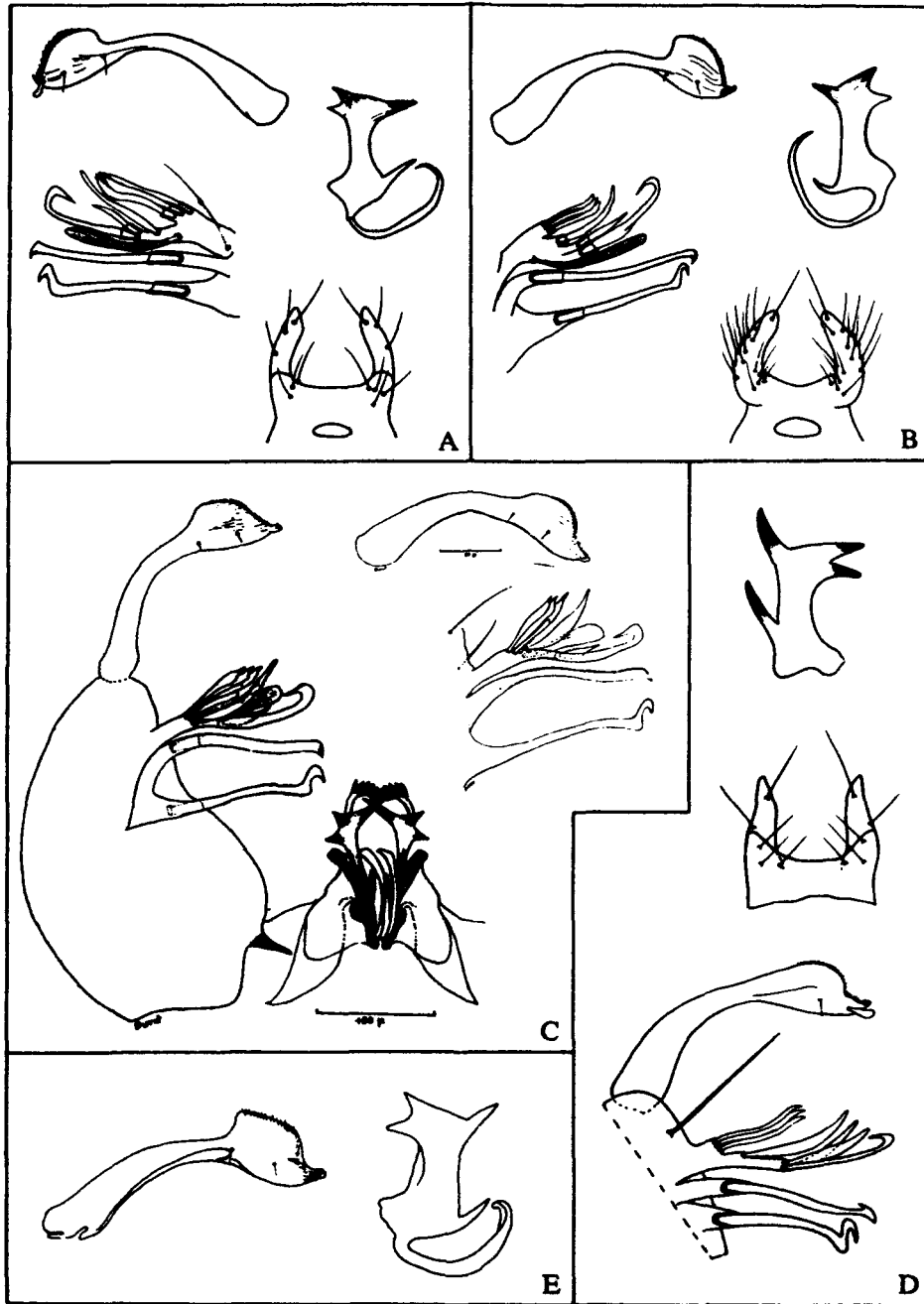
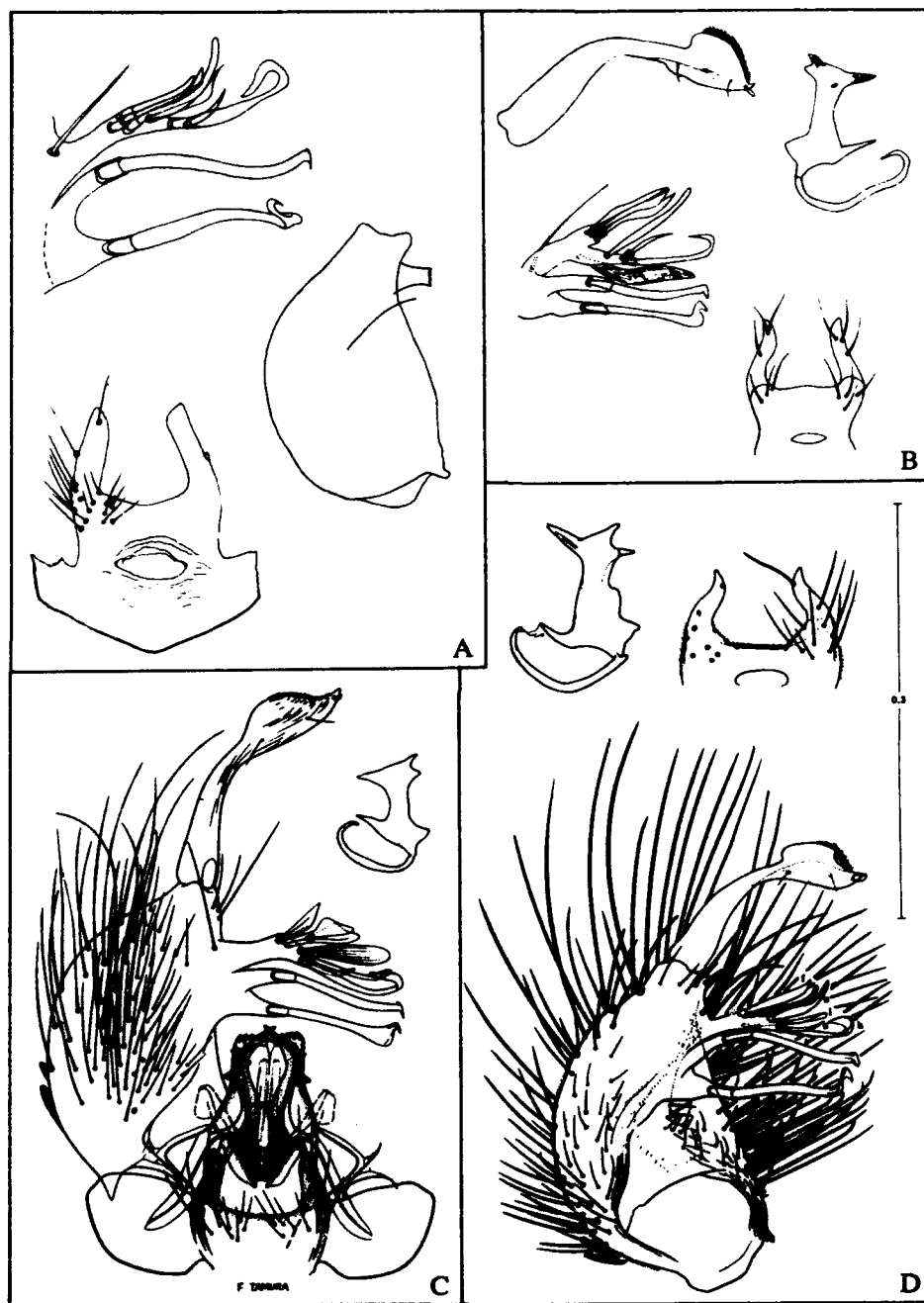


Fig. 87. *Culex pilosus*: A, Rozeboom and Komp 1950; B, Rozeboom and Komp 1950 (as *hesitator*); C, Duret 1953; D, Lane 1953. E, Sirivanakarn 1983.



**Fig. 88.** *Culex pilosus*: A, Sirivanakarn 1983; B, Cova Garcia, Sutil and Rausseo 1966a; C, Carpenter and LaCasse 1955; D, Belkin, Heinemann and Page 1970.

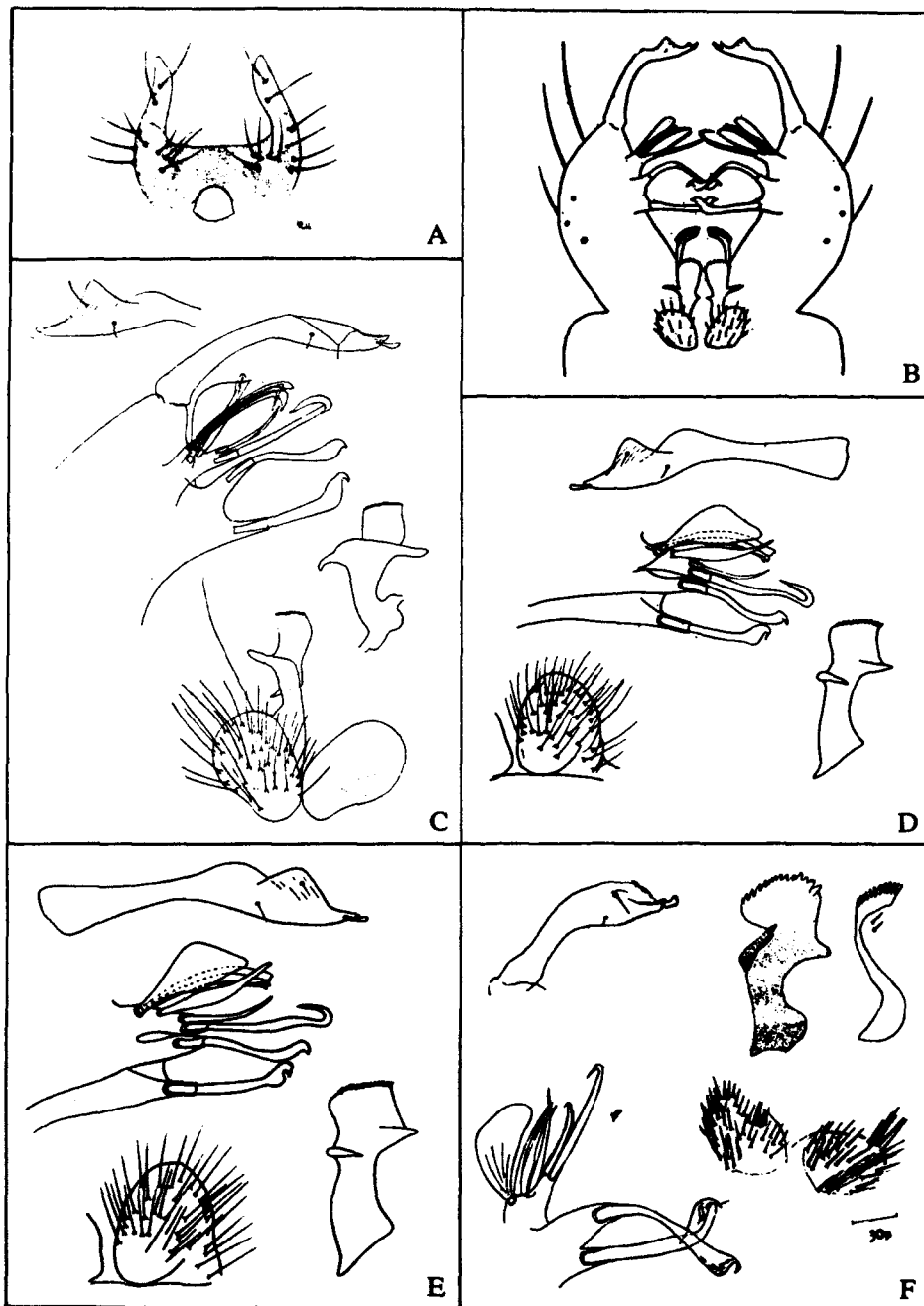
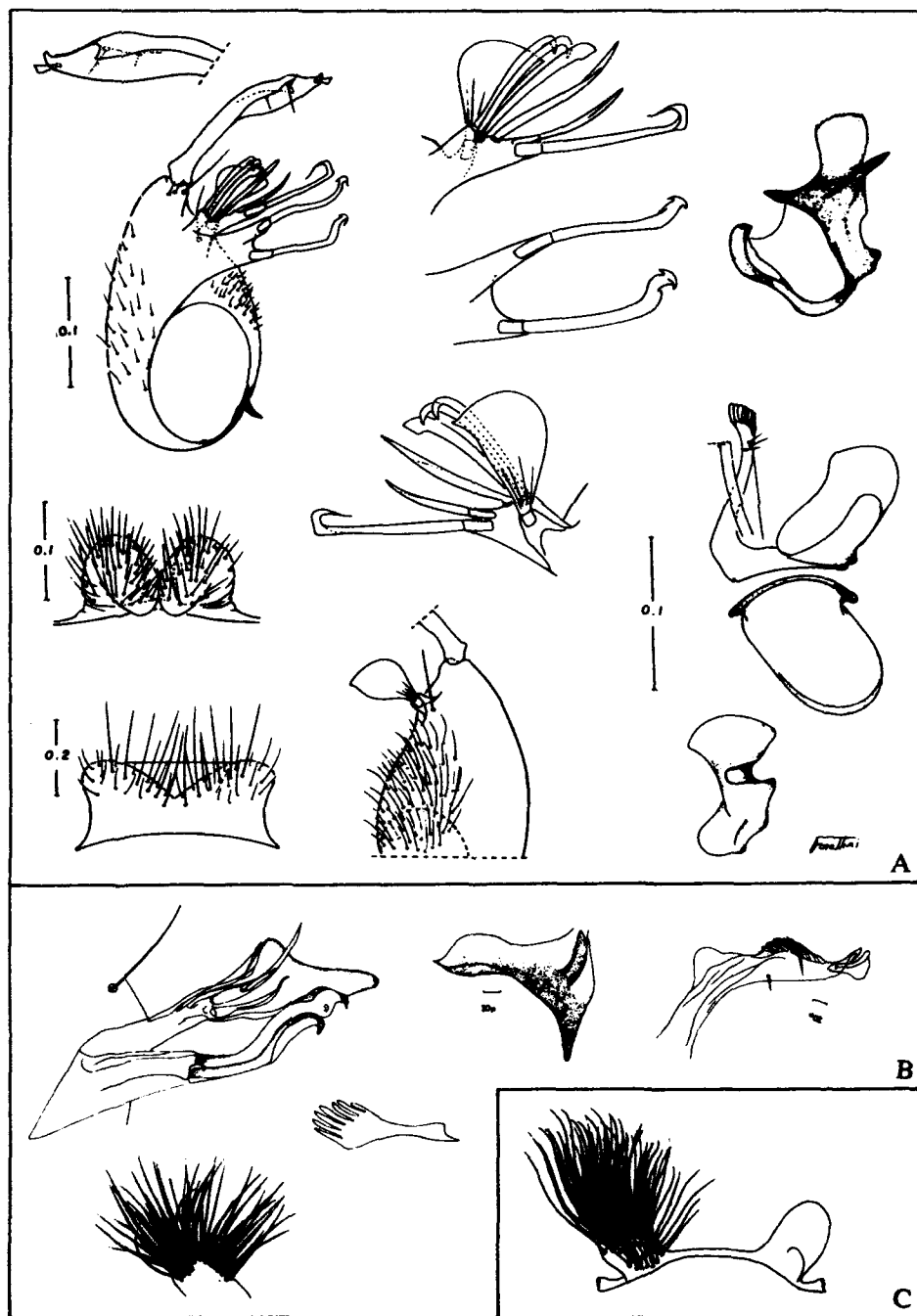
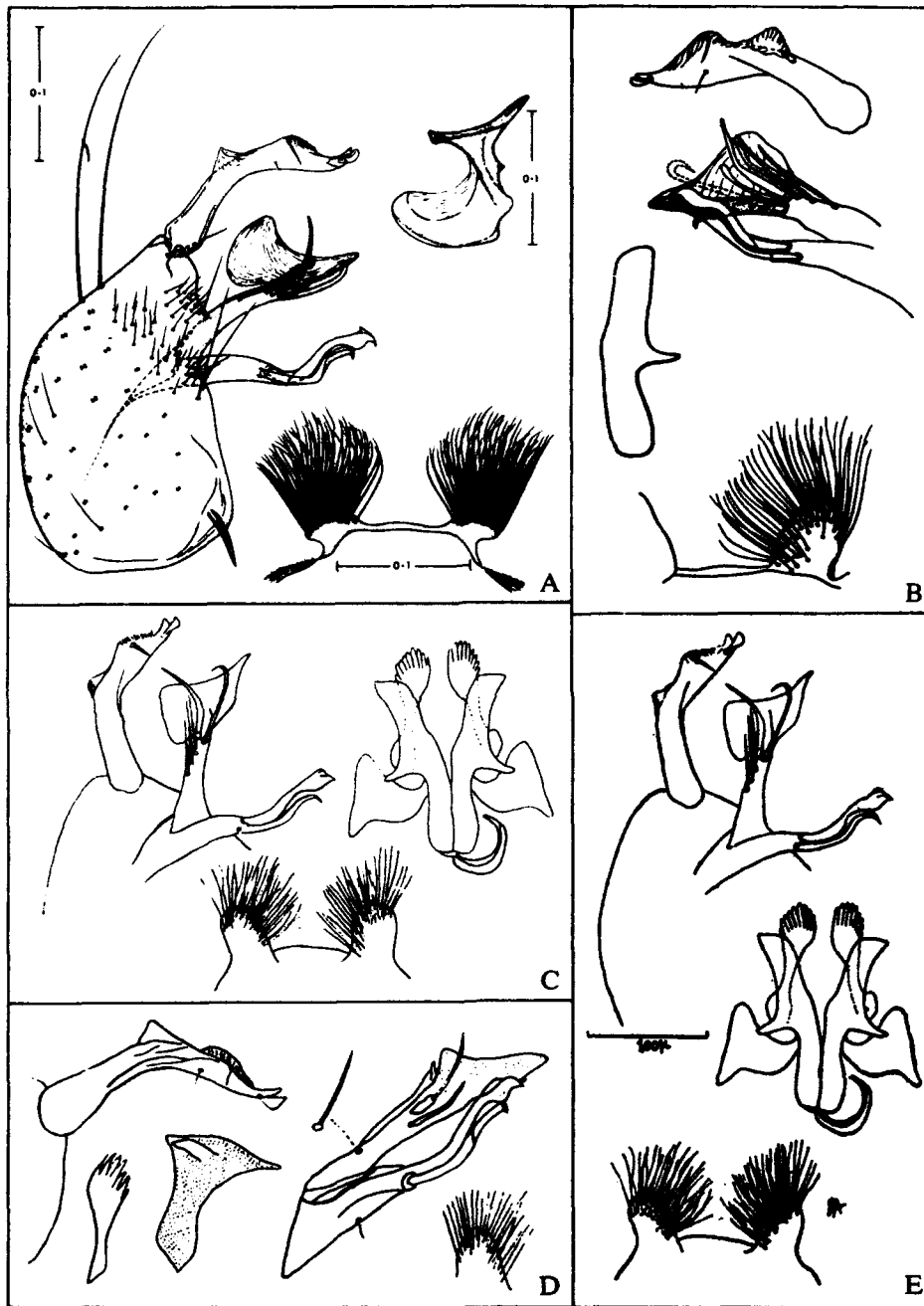


Fig. 89. A, *Culex pilosus*: Roth and Young 1944. B-F, *Culex plectoporpe*: B, Dyar 1928; C, Root 1927b; D, Rozeboom and Komp 1950; E, Lane 1953; F, Senevet and Abonnenc 1939.



**Fig. 90.** A, *Culex plectoporpe*: Forattini and Sallum 1987a. B,C, *Culex portesi*: B, Senevet and Abonnenc 1941; C, Sirivanakarn 1983.





**Fig. 91.** *Culex portesi*: A, Sirivanakarn and Degallier 1982; B, Rozeboom and Komp 1950; C, Floch and Kramer 1965 (as *cayennensis*); D, Floch and Kramer 1965; E, Floch and Abonnenc 1945b (as *cayennensis*).

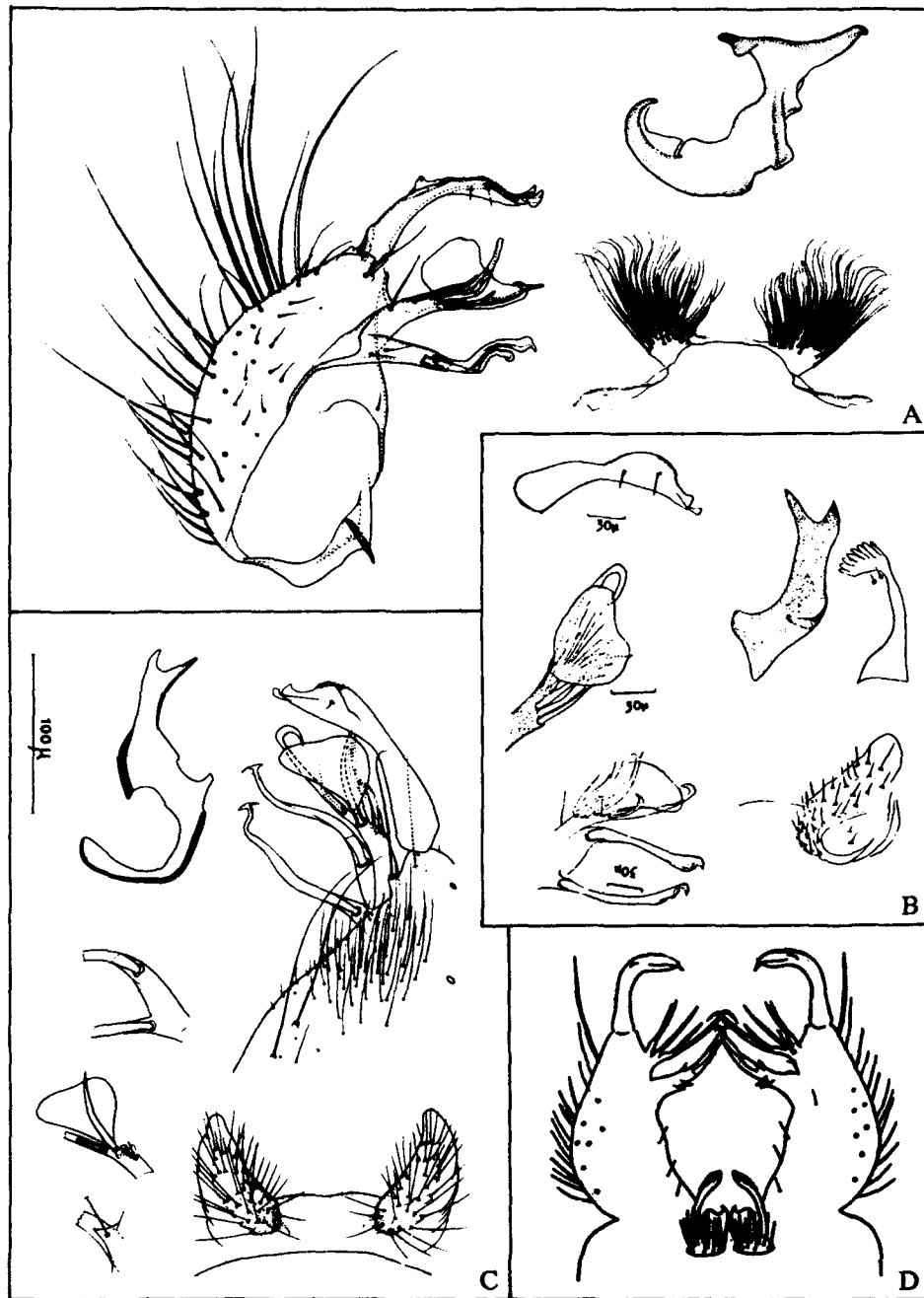


Fig. 92. A, *Culex portesi*: Aitken and Galindo 1966. B, C, *Culex productus*: B, Senévet and Abonnenc 1939; C, Clastrier 1971. D, *Culex psatharus*: Dyar 1928.

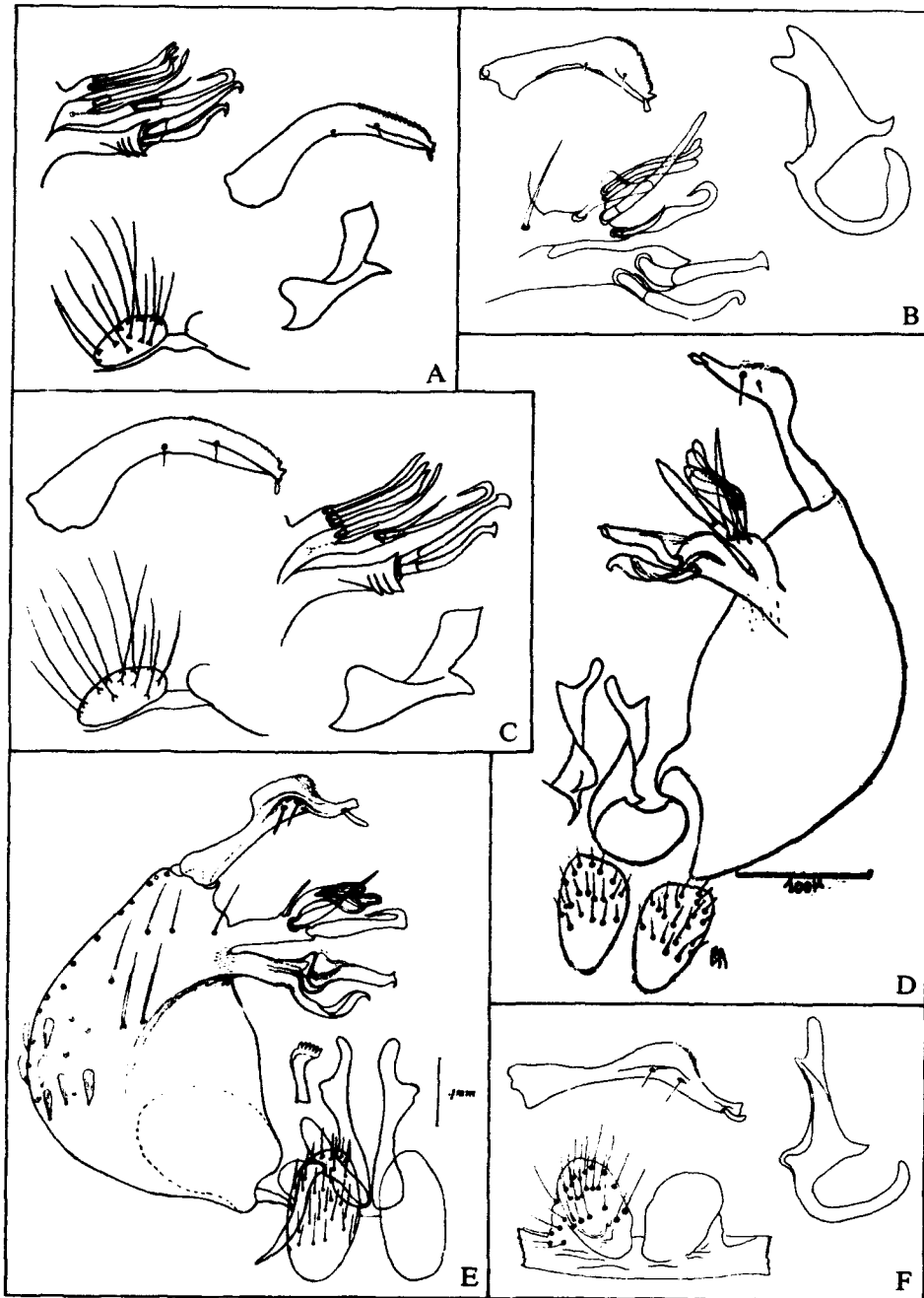


Fig. 93. A-C, *Culex psatharus*: A, Rozeboom and Komp 1950; B, Sirivanakarn 1983; C, Lane 1953. D-F, *Culex putumayensis*: D, Floch and Abonnenc 1945c (as *cavernicolus*); E, Matheson 1934; F, Sirivanakarn 1983.

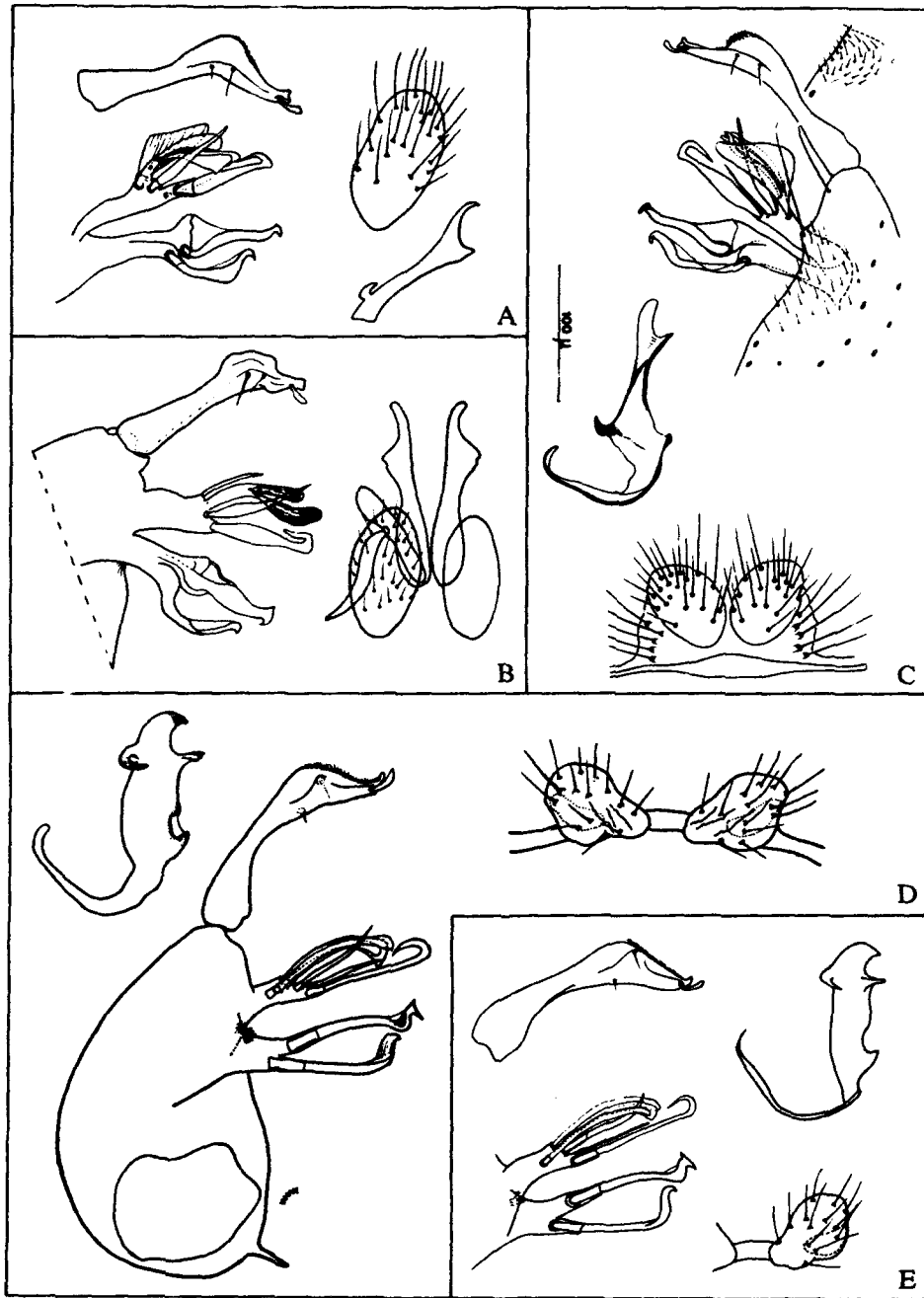
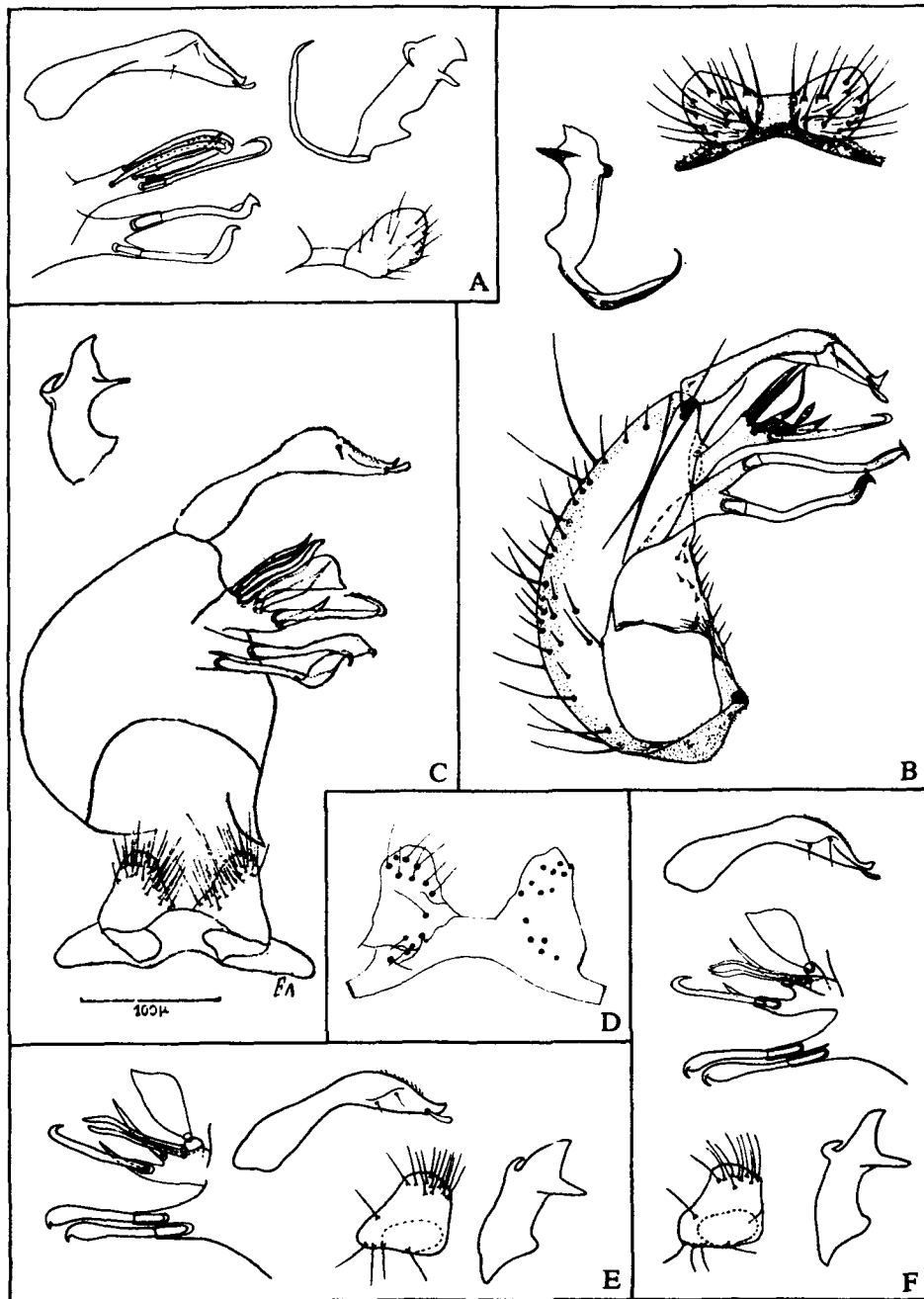


Fig. 94. A-C, *Culex putumayensis*: A, Rozeboom and Komp 1950; B, Lane 1953; C, Clastrier 1971. D,E, *Culex quadrifoliatus*: D, Komp 1936b; E, Rozeboom and Komp 1950.



**Fig. 95.** A, *Culex quadrifoliatus*: Lane 1953. B, *Culex quasihibridus*: Galindo and Blanton 1954. C-F, *Culex rabanicola*: C, Floch and Abonnenc 1946a; D, Sirivanakarn 1983; E, Lane 1953; F, Rozeboom and Komp 1950.

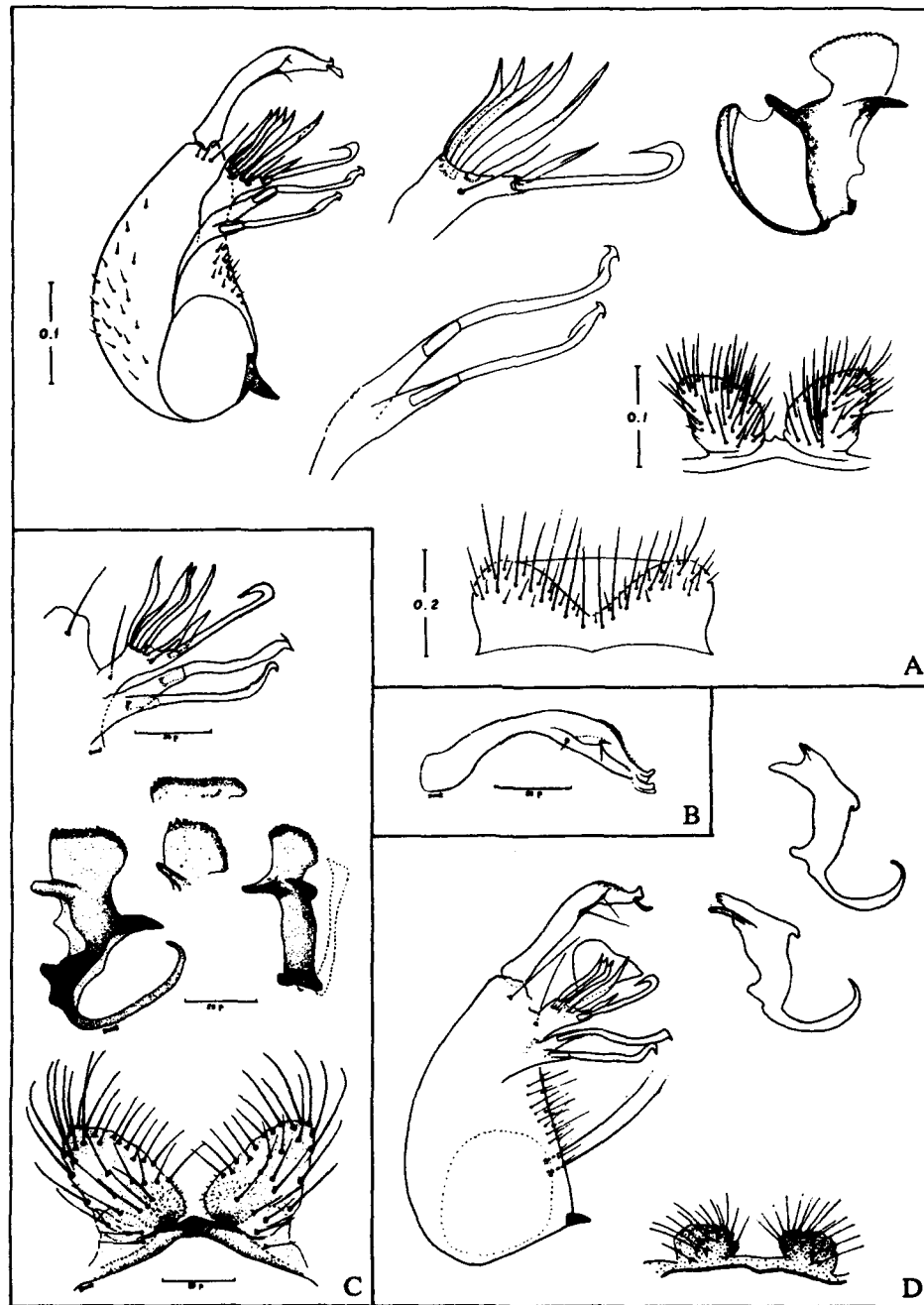


Fig. 96. A-C, *Culex rabelloi*: A, Forattini and Sallum 1987a; B, Duret 1953 (as *albinensis*); C, Duret 1954 (as *albinensis*). D, *Culex rachoui*: Duret 1968b.

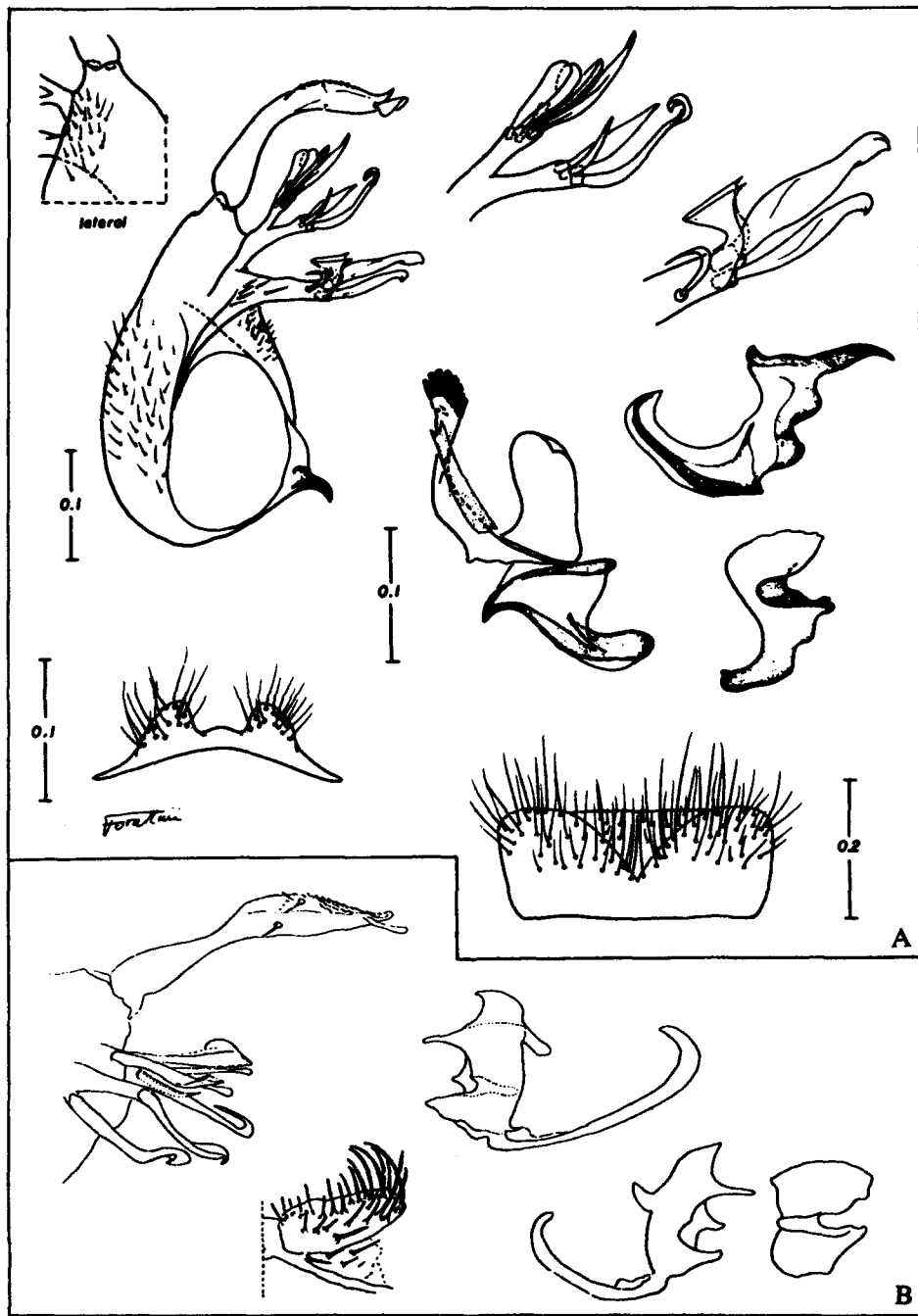


Fig. 97. A, *Culex ribeirensis*: Forattini and Sallum 1985. B, *Culex ronderosi*: de Linero 1967.

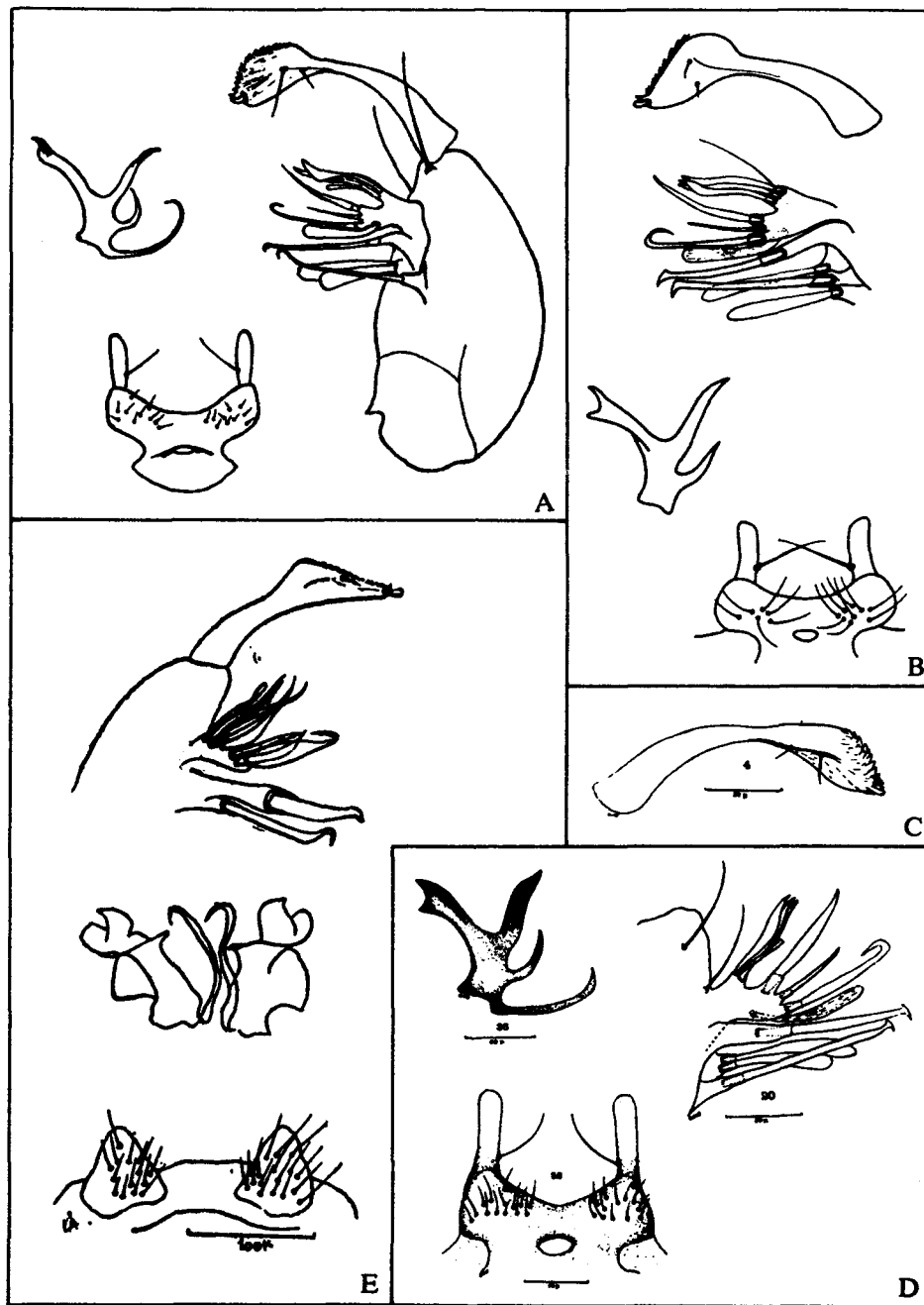


Fig. 98. A-D, *Culex* roots: A, Rozeboom 1935; B, Rozeboom and Komp 1950; C, Duret 1953; D, Duret 1954. E, *Culex rorotaensis*: Floch and Abonnenc 1946a.



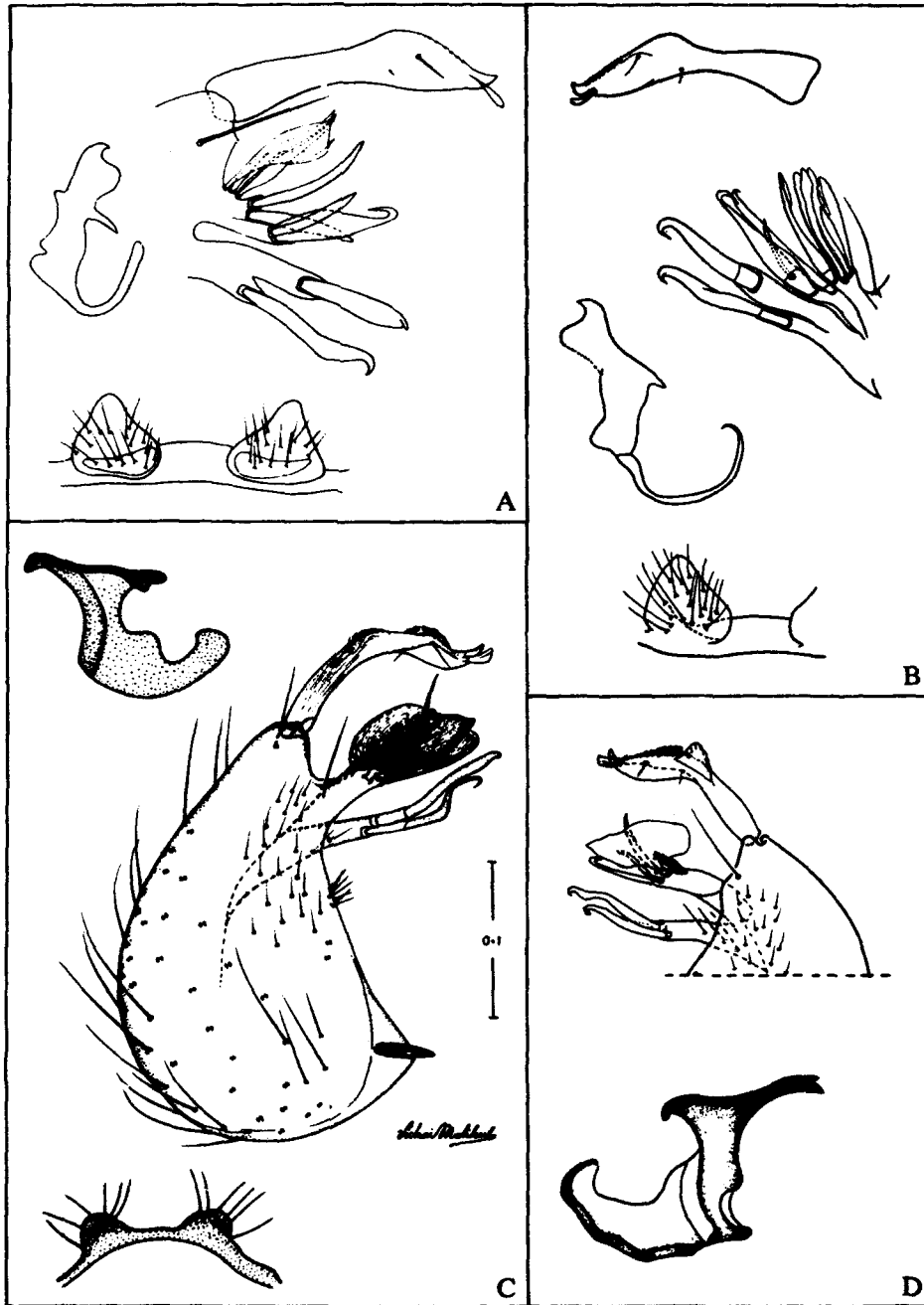


Fig. 99. A,B, *Culex rorotaensis*: A, Lane 1953; B, Rozeboom and Komp 1950. C,D, *Culex sacchettae*: C, Sirivanakarn and Jakob 1982a; D, Forattini and Sallum 1989d.

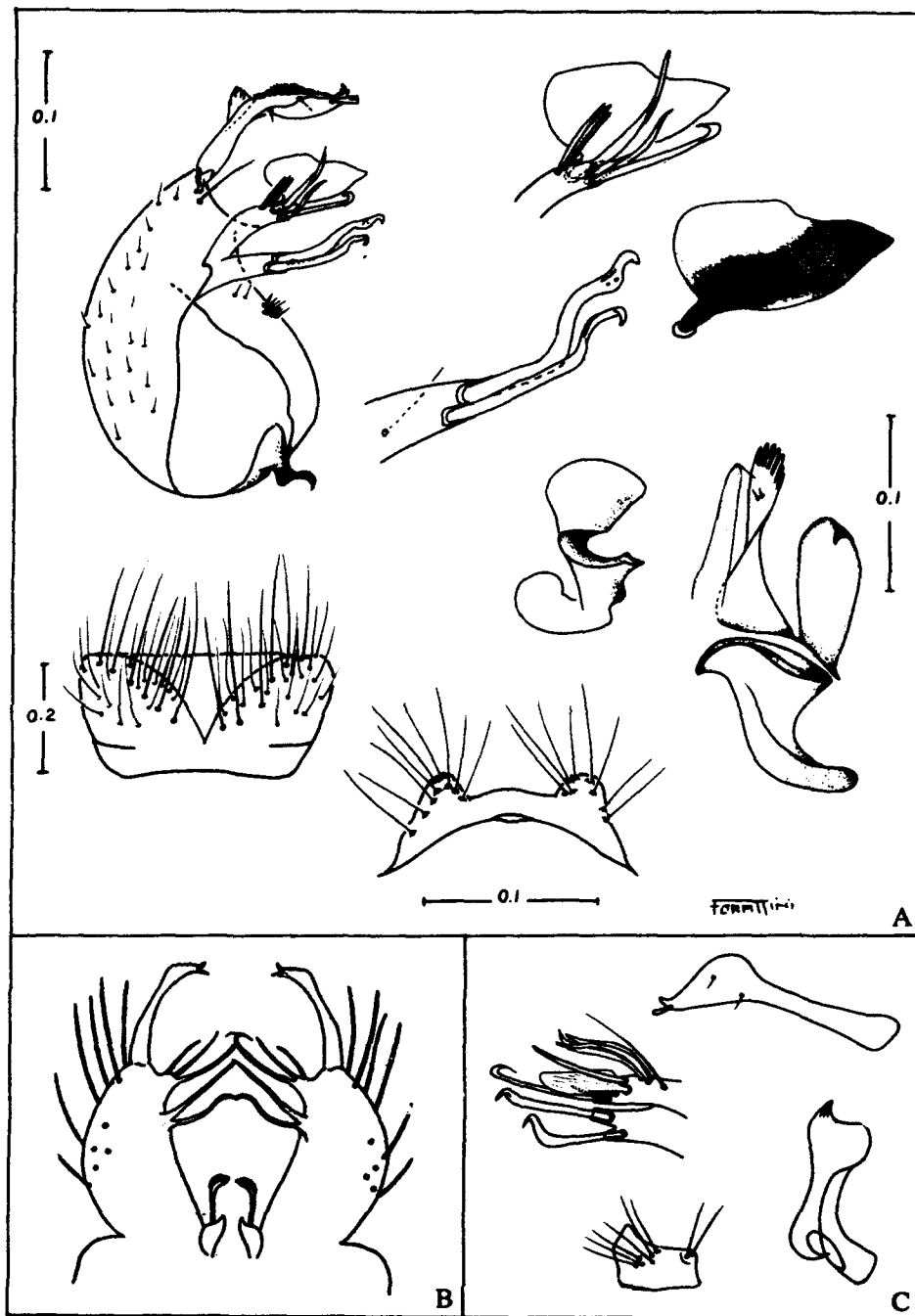


Fig. 100. A, *Culex sacchettae*: Forattini and Sallum 1989d. B,C, *Culex saramaccensis*: B, Dyar 1928; C, Rozeboom and Komp 1950 (as *implicatus*).

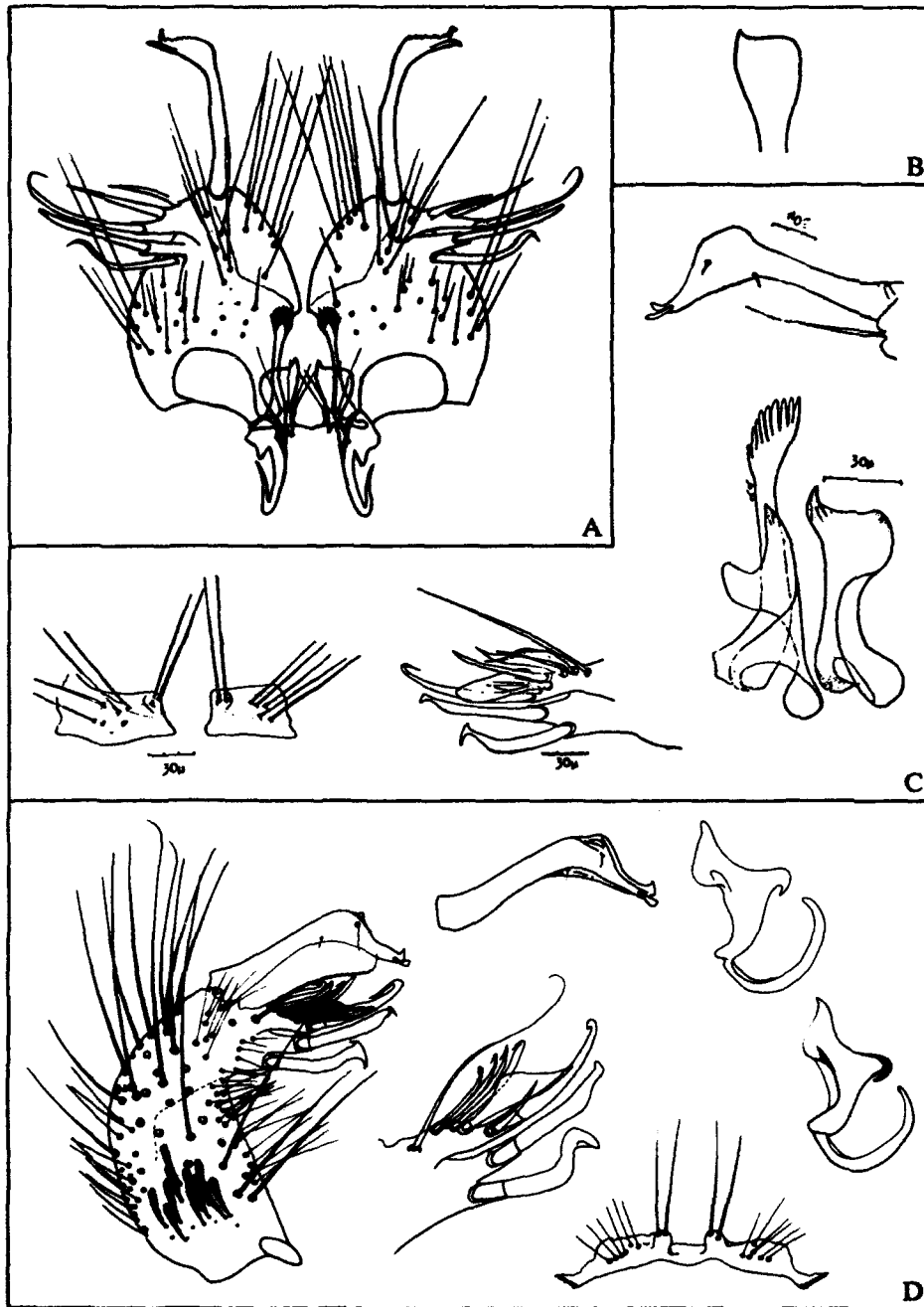


Fig. 101. *Culex saramaccensis*: A, Bonne and Bonne-Wepster 1925; B, Rozeboom and Komp 1950; C, Senevet and Abonnenc 1939 (as *implicatus*); D, Sirivanakarn 1983.

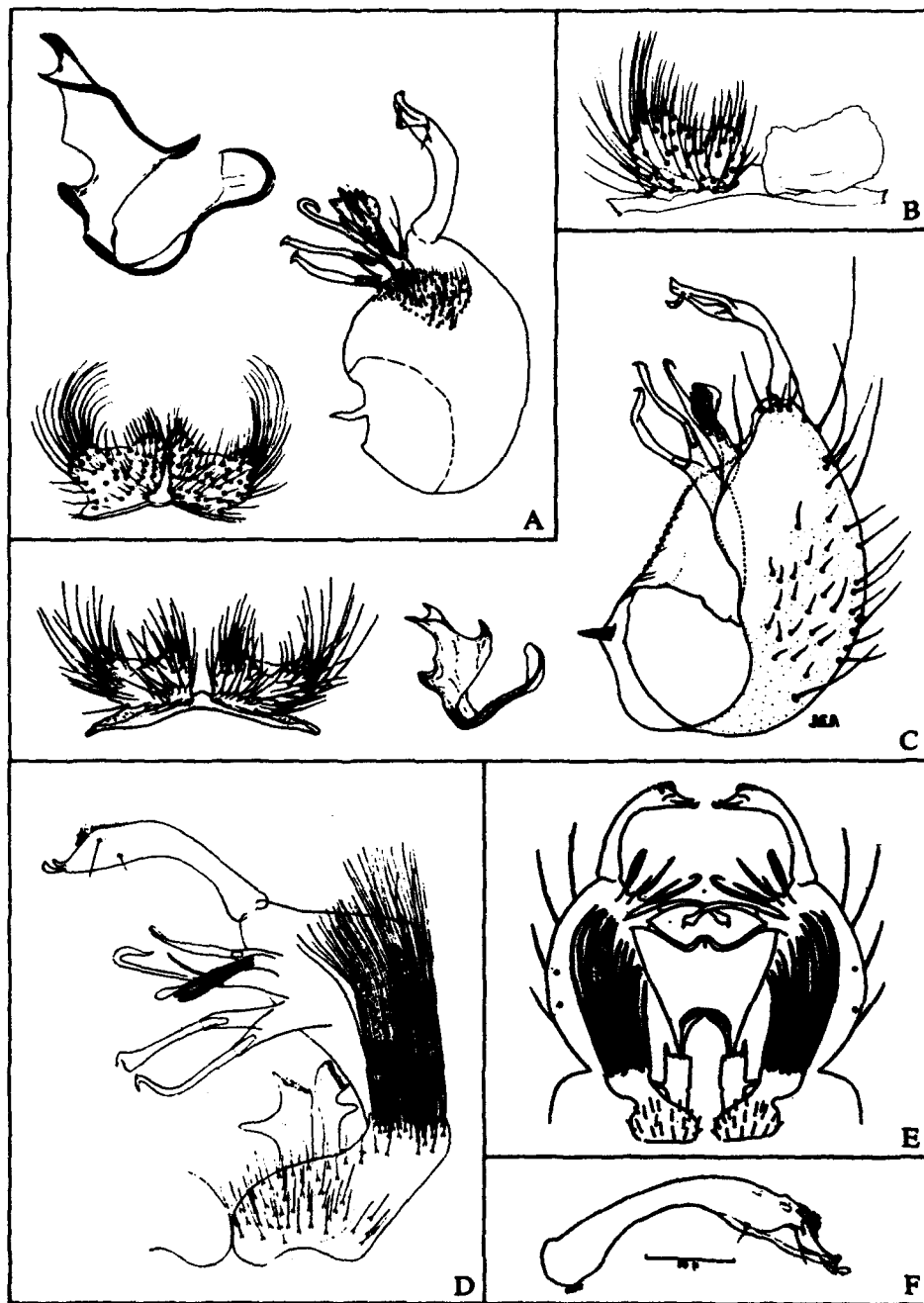


Fig. 102. A-C, *Culex sardineræ*: A, Fox 1953; B, Sirivanakarn 1983; C, Galindo and Blanton 1954 (as *bilobatus*). D-F, *Culex serratimarge*: D, Root 1927b; E, Dyar 1928; F, Duret 1953.

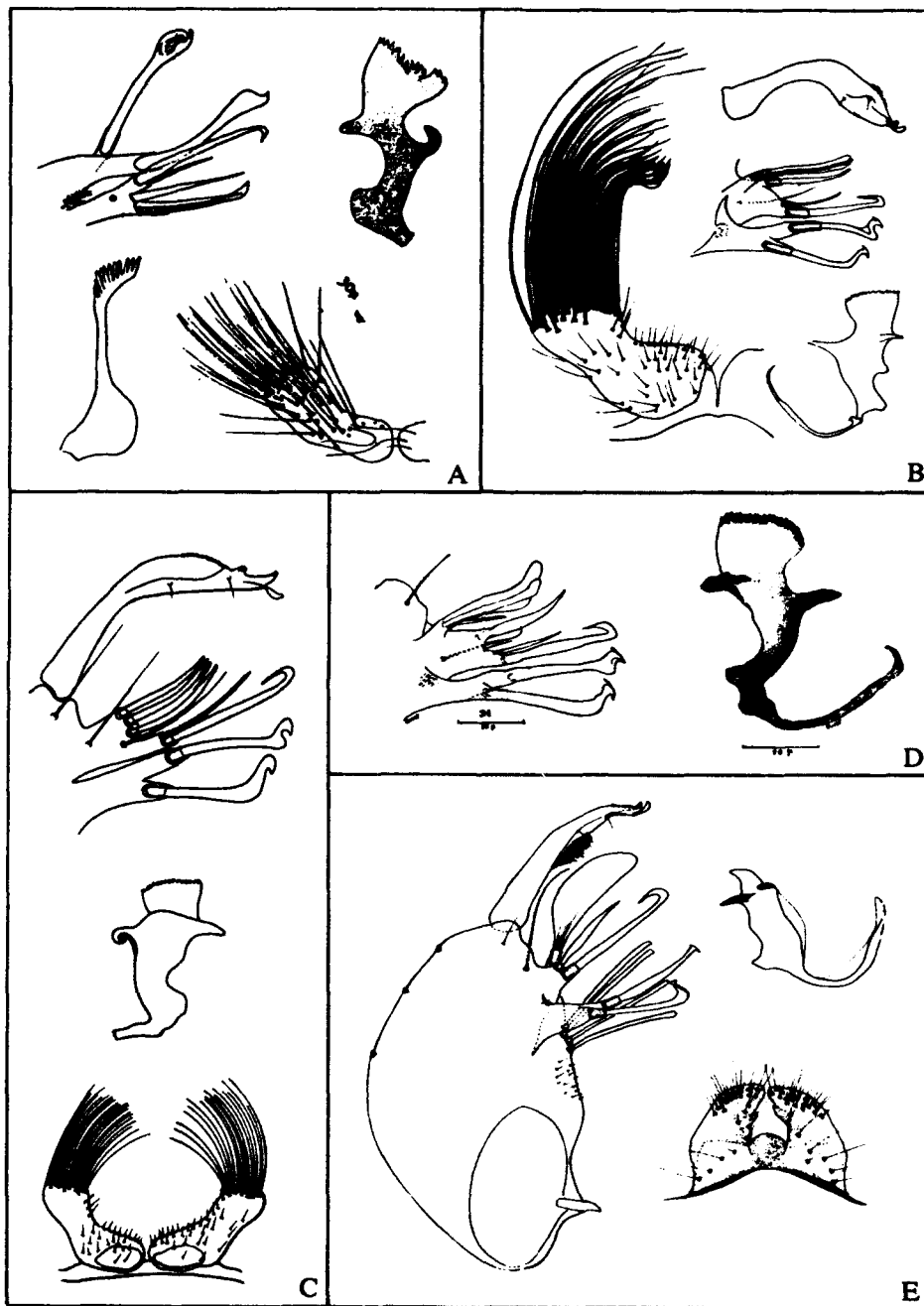


Fig. 103. A-D, *Culex serratimarge*: A, Senevet and Abonnenc 1939; B, Rozeboom and Komp 1950; C, Lane 1953; D, Duret 1954. E, *Culex silvai*: Duret 1968e.

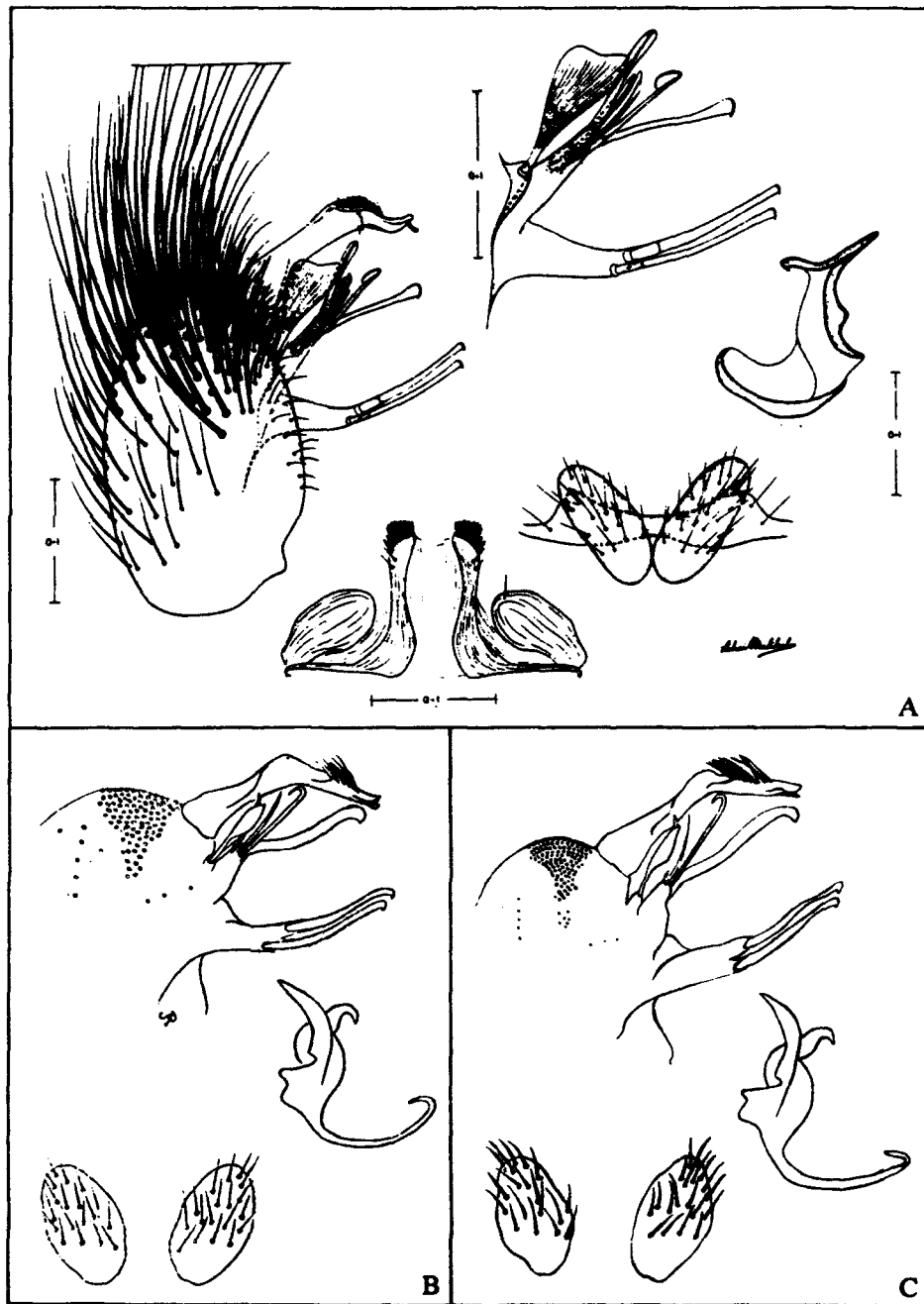


Fig. 104. *Culex simulator*: A, Sirivanakarn and Heinemann 1980; B, Anduze 1949a (as *venezuelensis*); C, Cova Garcia, Sutil and Rausseo 1966a (as *venezuelensis*).

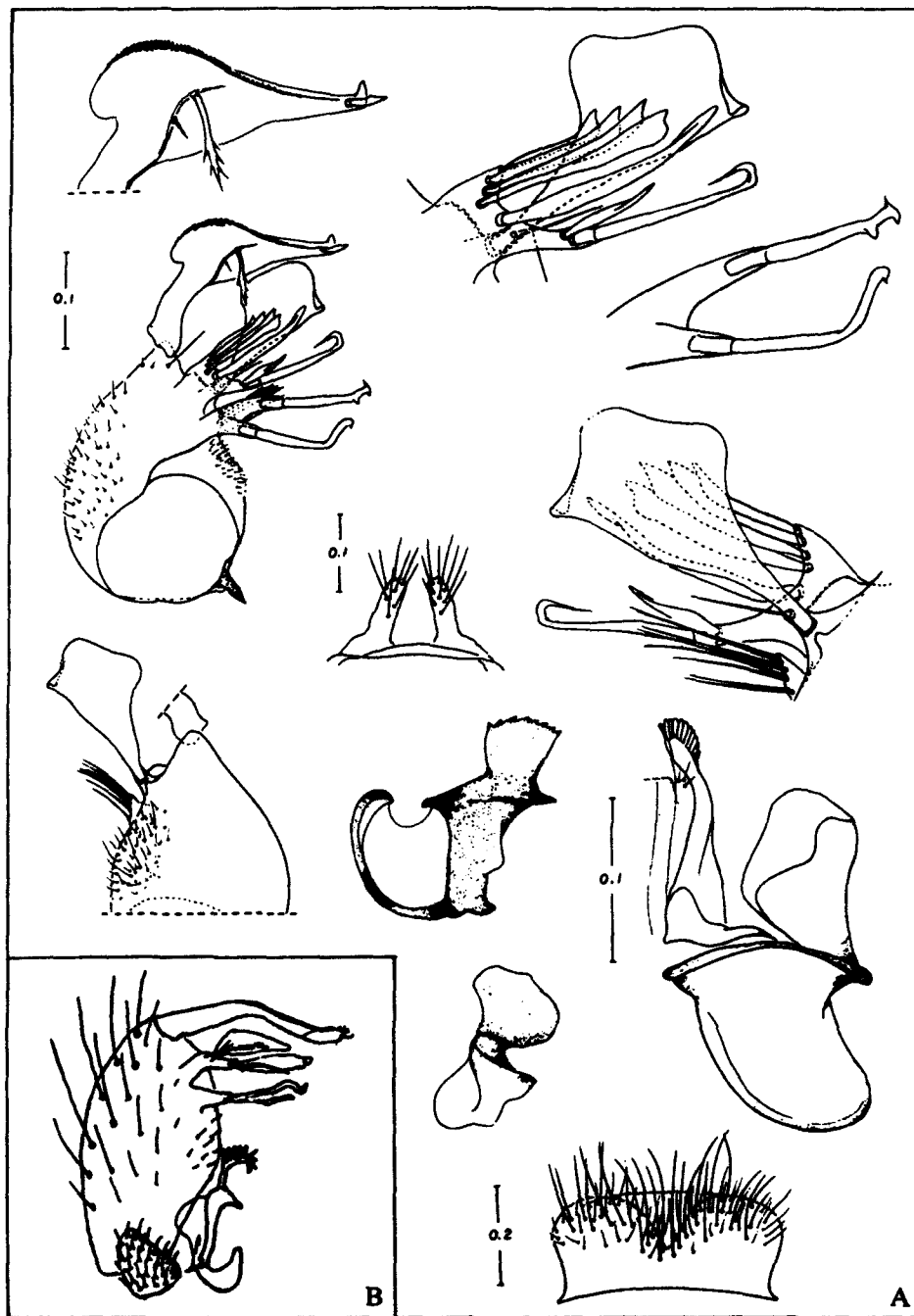
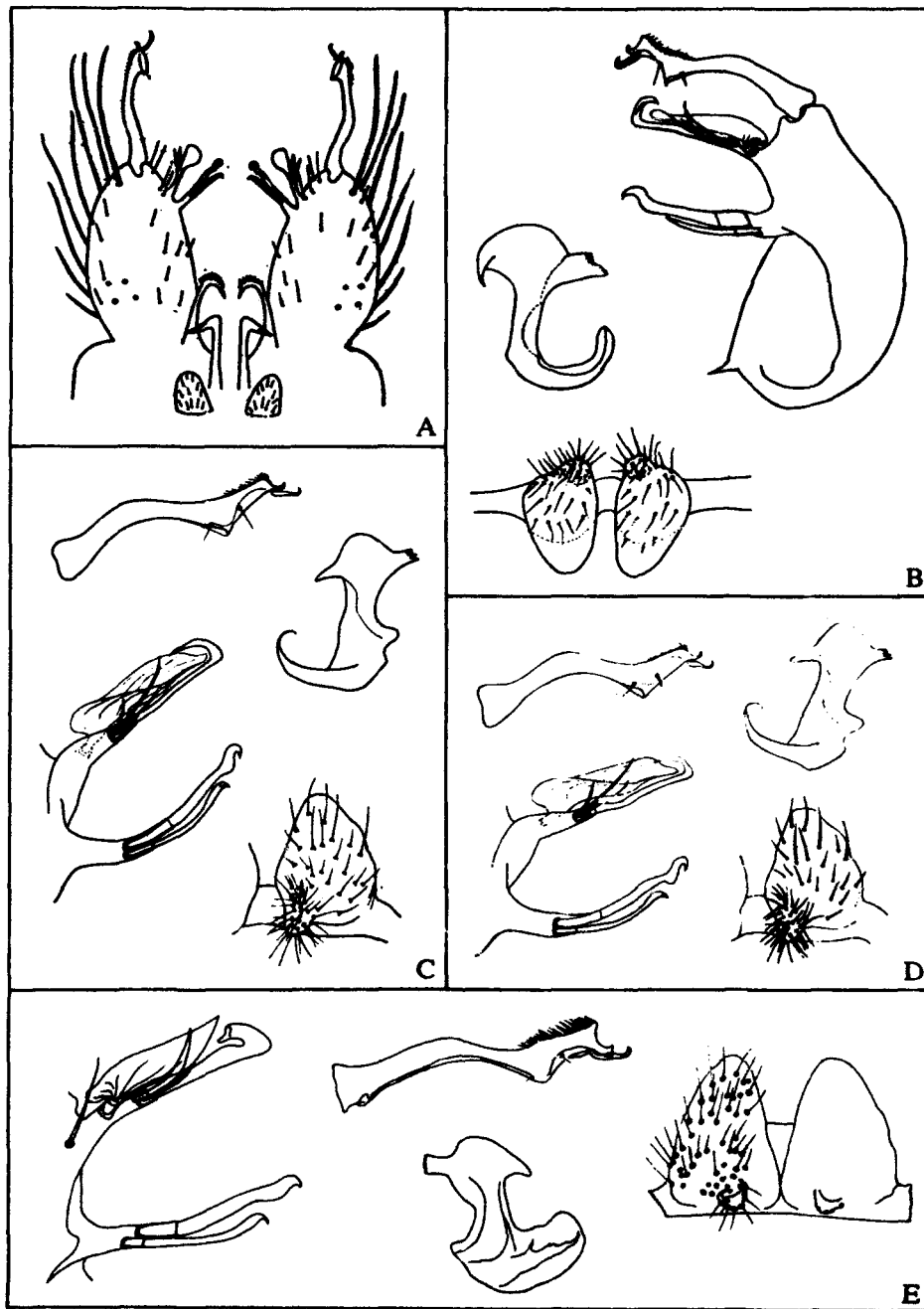


Fig. 105. A, *Culex spathulatus*: Forattini and Sallum 1987b. B, *Culex spissipes*: Dyar 1923d (as *menytes*).



**Fig. 106.** *Culex spissipes*: A, Dyar 1928 (as *menytes*); B, Komp and Curry 1932 (as *haynei*); C, Rozeboom and Komp 1950 (as *menytes*); D, Cova Garcia, Sutil and Rausseo 1966a (as *menytes*); E, Sirivanakarn 1983.



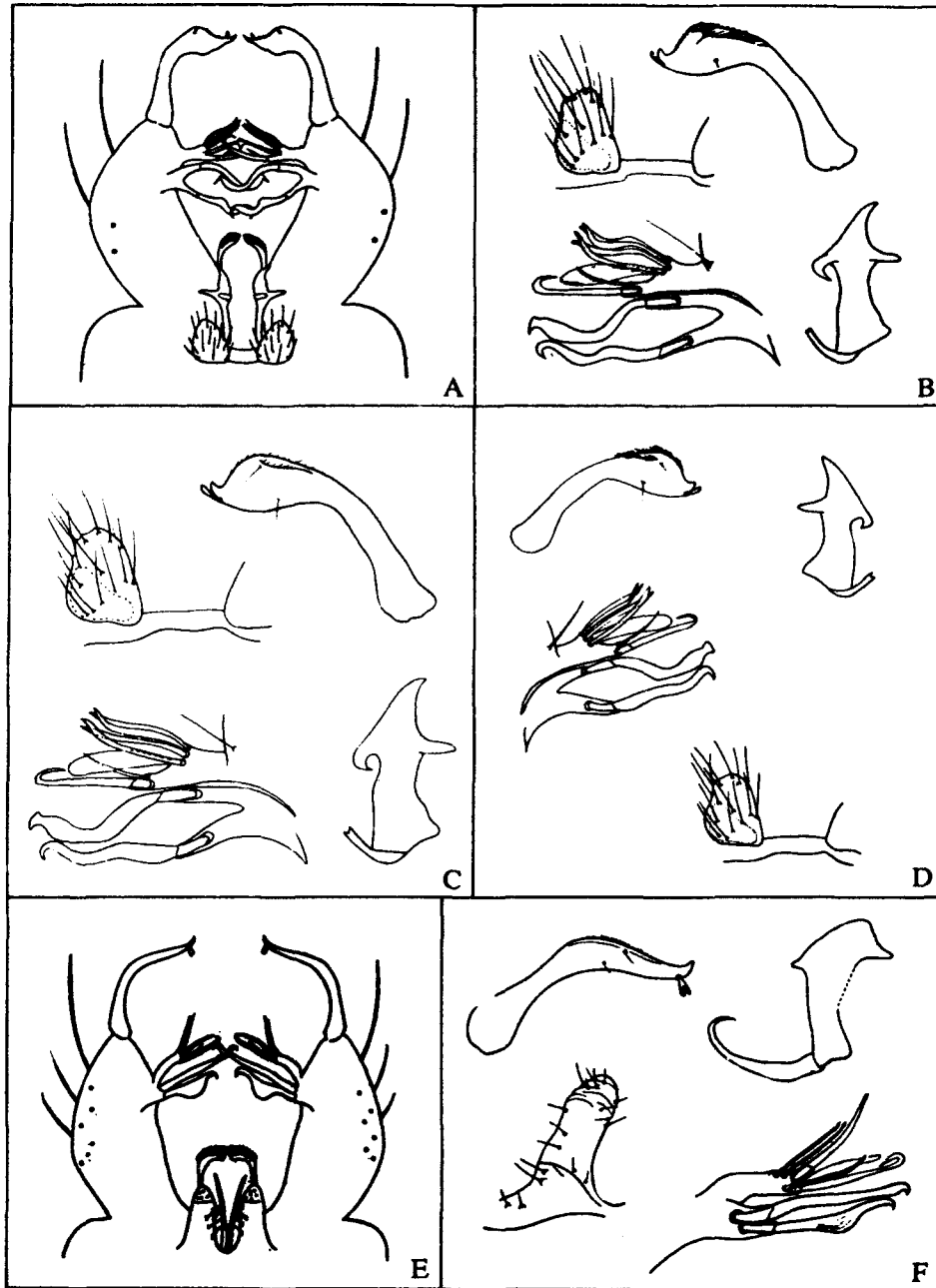


Fig. 107. A-D, *Culex sursumptor*: A, Dyar 1928; B, Rozeboom and Komp 1950; C, Lane 1953; D, Cova Garcia, Sutil and Rausseo 1966a. E,F, *Culex taeniopus*: E, Dyar 1928 (as *opisthopus*); F, Rozeboom and Komp 1950 (as *opisthopus*).

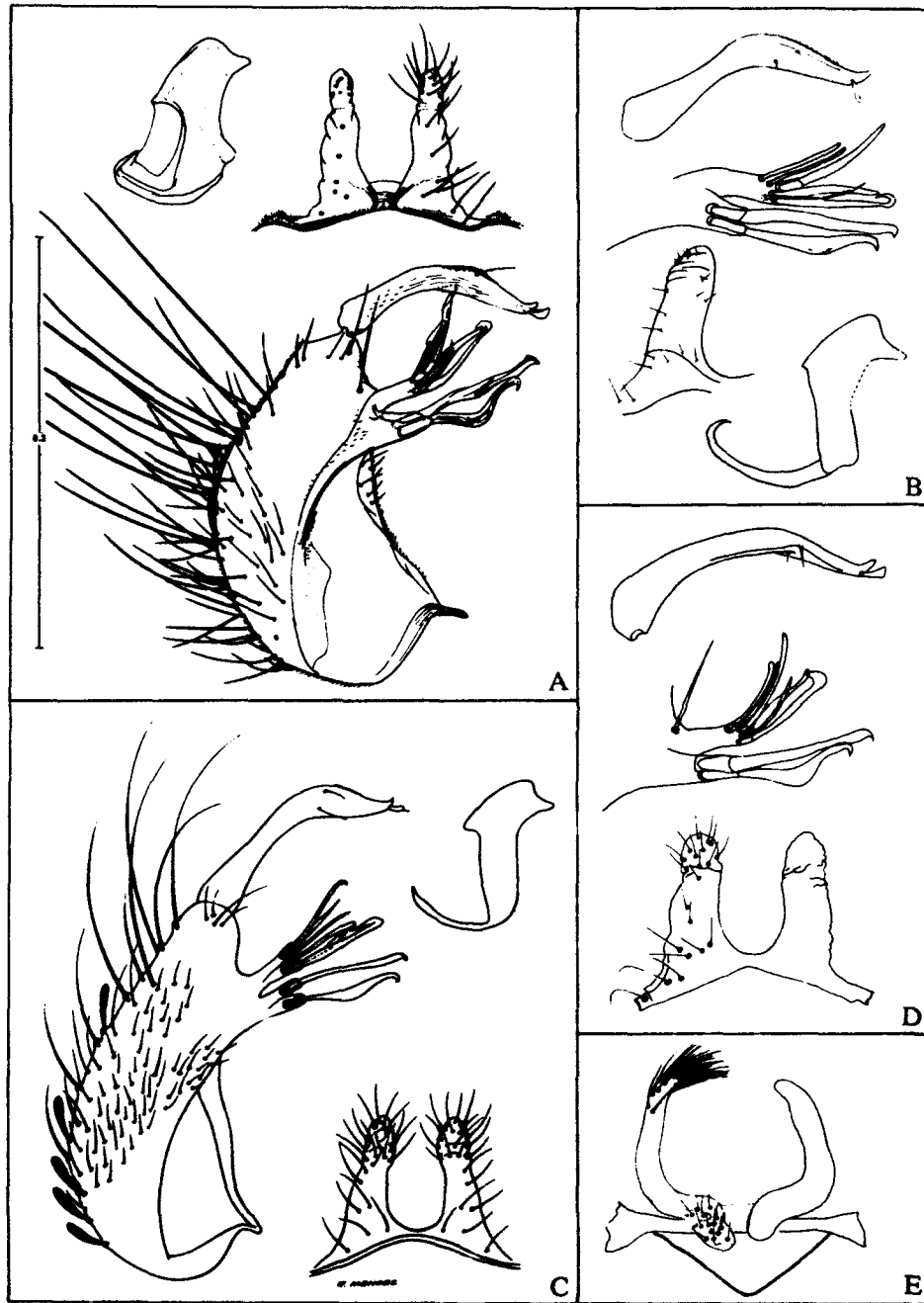


Fig. 108. A-D, *Culex taeniopus*: A, Belkin, Heinemann and Page 1970 (as *opisthopus*); B, Lane 1953 (as *opisthopus*); C, Carpenter and LaCasse 1955 (as *opisthopus*); D, Sirivanakarn 1983. E, *Culex tecmarsis*: Sirivanakarn 1983.

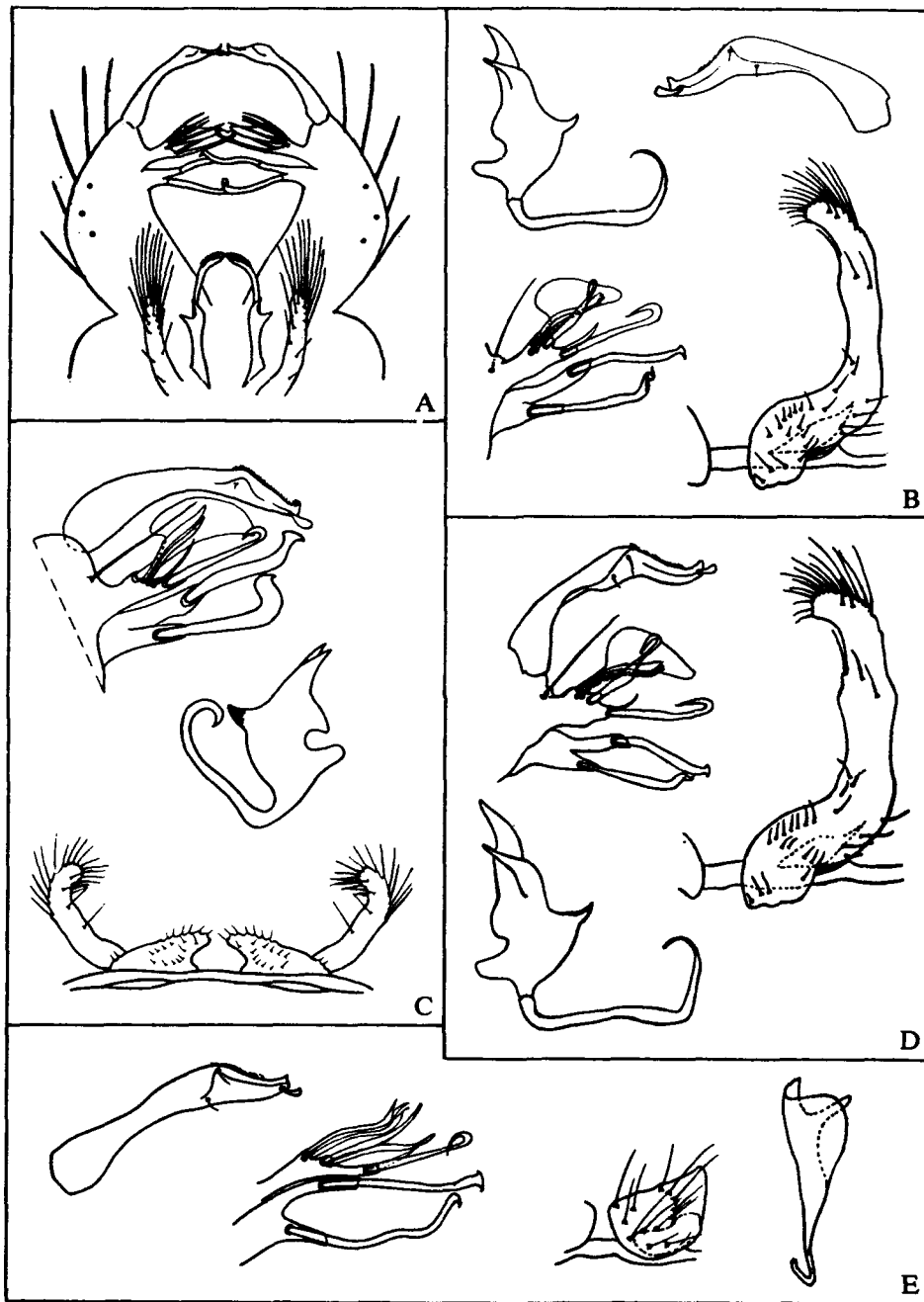


Fig. 109. A-D, *Culex tecmarsis*: A, Dyar 1928; B, Rozeboom and Komp 1950; C, Lane 1953; D, Cova Garcia, Sutil and Rausseo 1966a. E, *Culex terebor*: Rozeboom and Komp 1950.

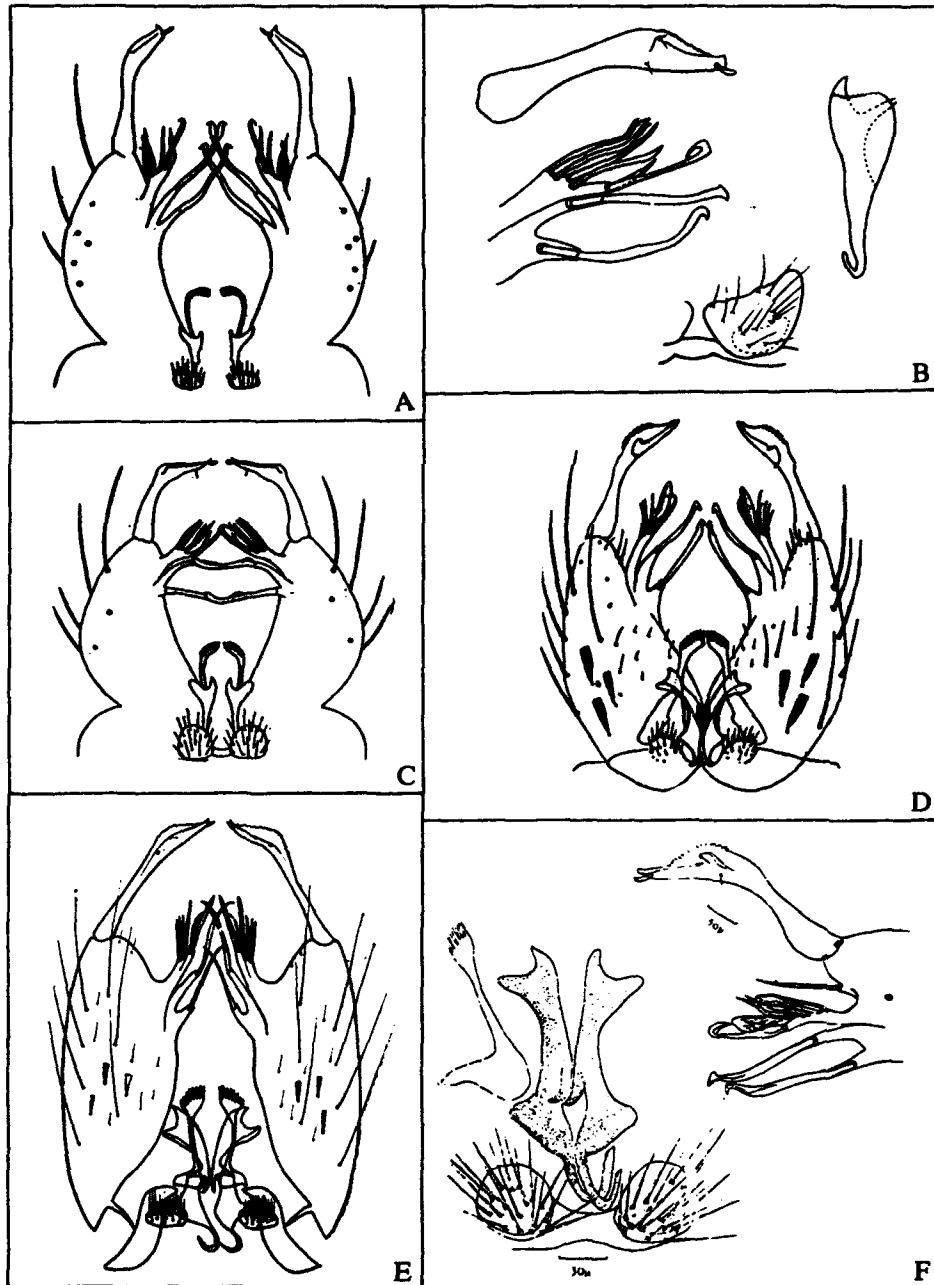


Fig. 110. A, B, *Culex terebor*: A, Dyar 1928; B, Lane 1953. C-F, *Culex theobaldi*: C, Dyar 1928 (as *chrysonotum*); D, Howard, Dyar and Knab 1913 (as *chrysonotum*); E, Bonne and Bonne-Wepster 1925; F, Senevet and Abonnenc 1939 (as *aurilatus*).

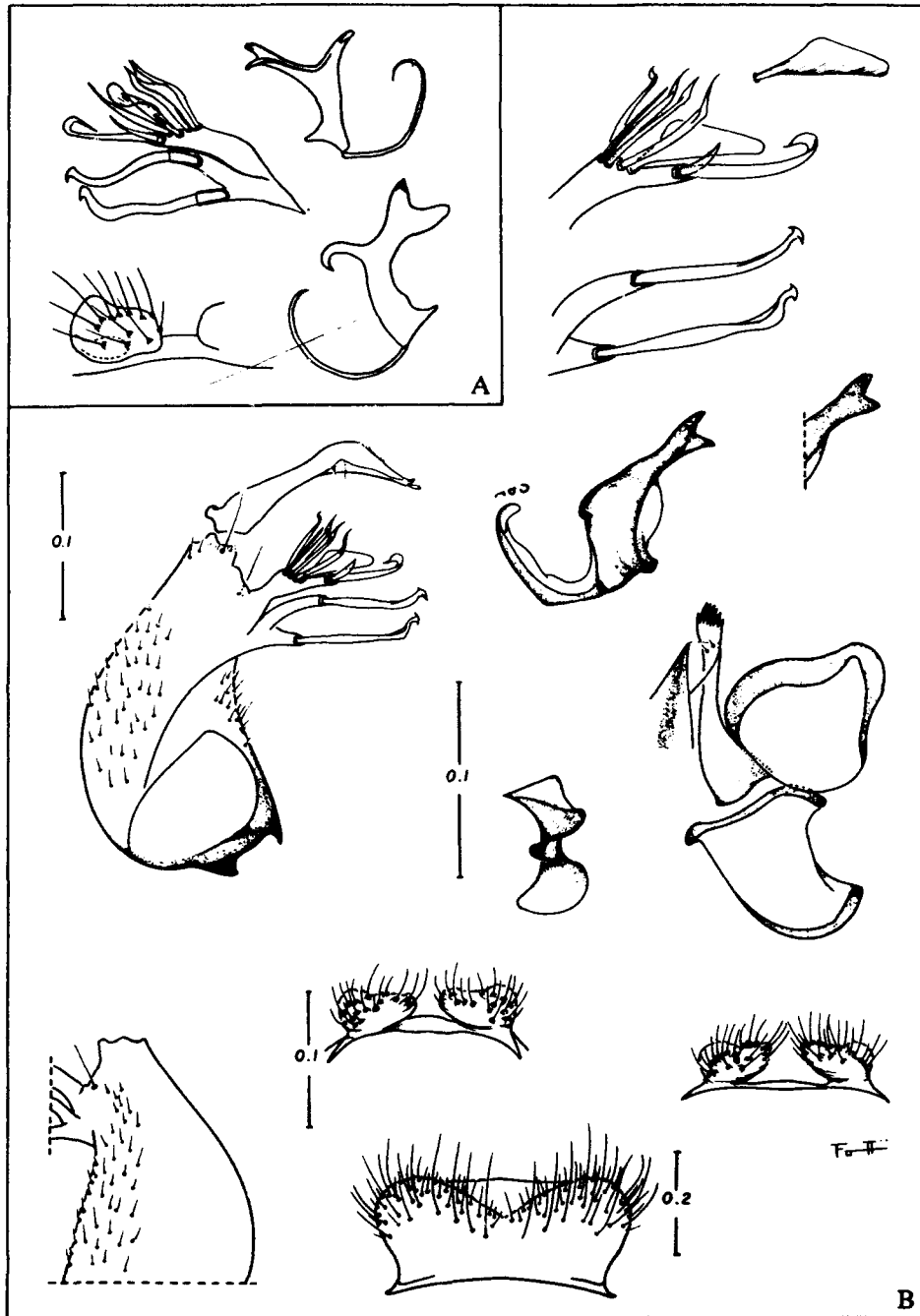


Fig. 111. *Culex theobaldi*: A, Rozeboom and Komp 1950 (as *chrysonotum*); B, Forattini and Sallum 1989c.

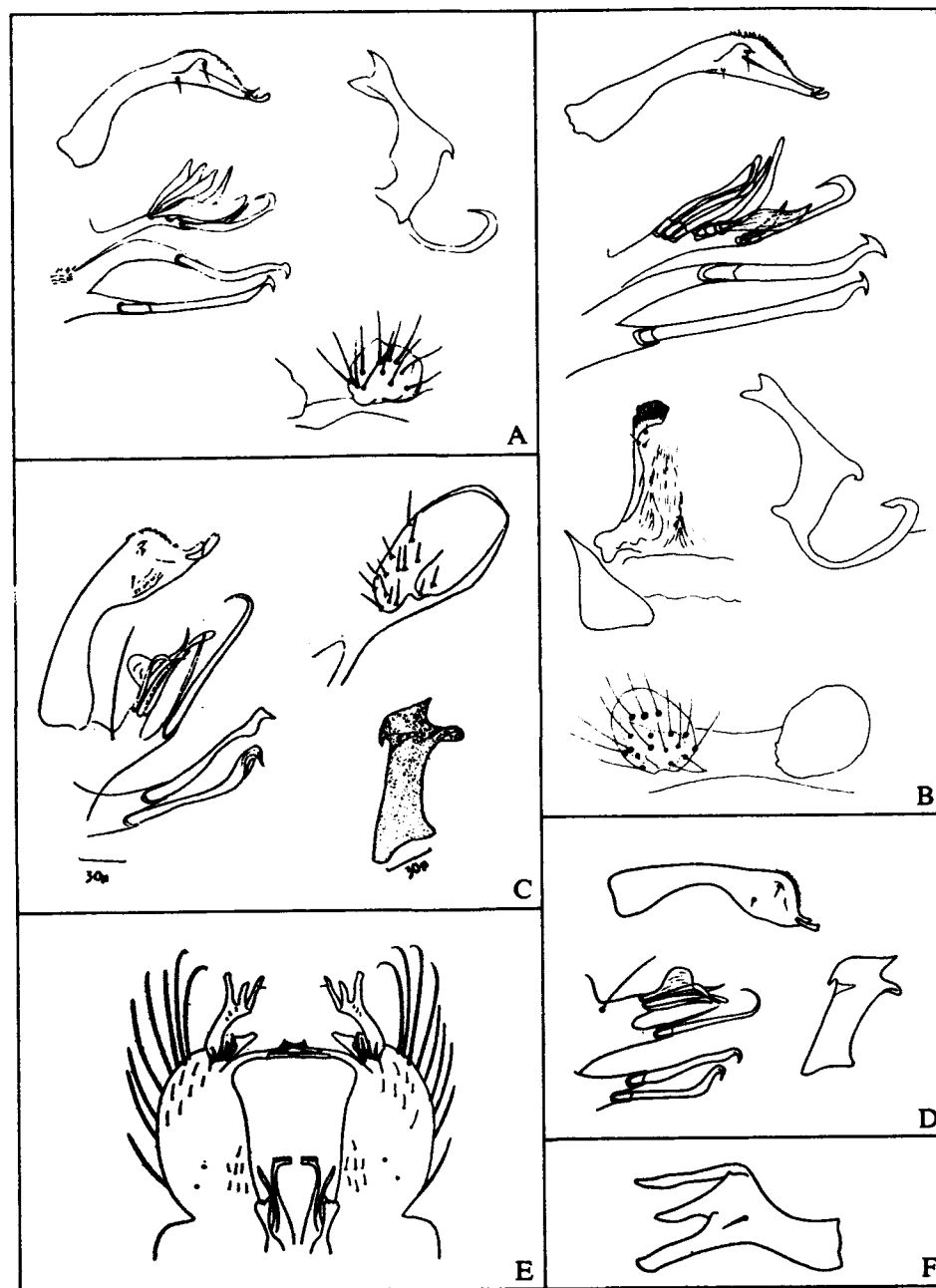


Fig. 112. A,B, *Culex theobaldi*: A, Cova Garcia, Sutil and Rausseo 1966a (as *chrysonotum*); B, Sirivanakarn 1983 (as *chrysonotum*). C,D, *Culex tournieri*: C, Senevet and Abonnenc 1939; D, Rozeboom and Komp 1950. E,F, *Culex trifidus*: E, Dyar 1928; F, Rozeboom and Komp 1950.

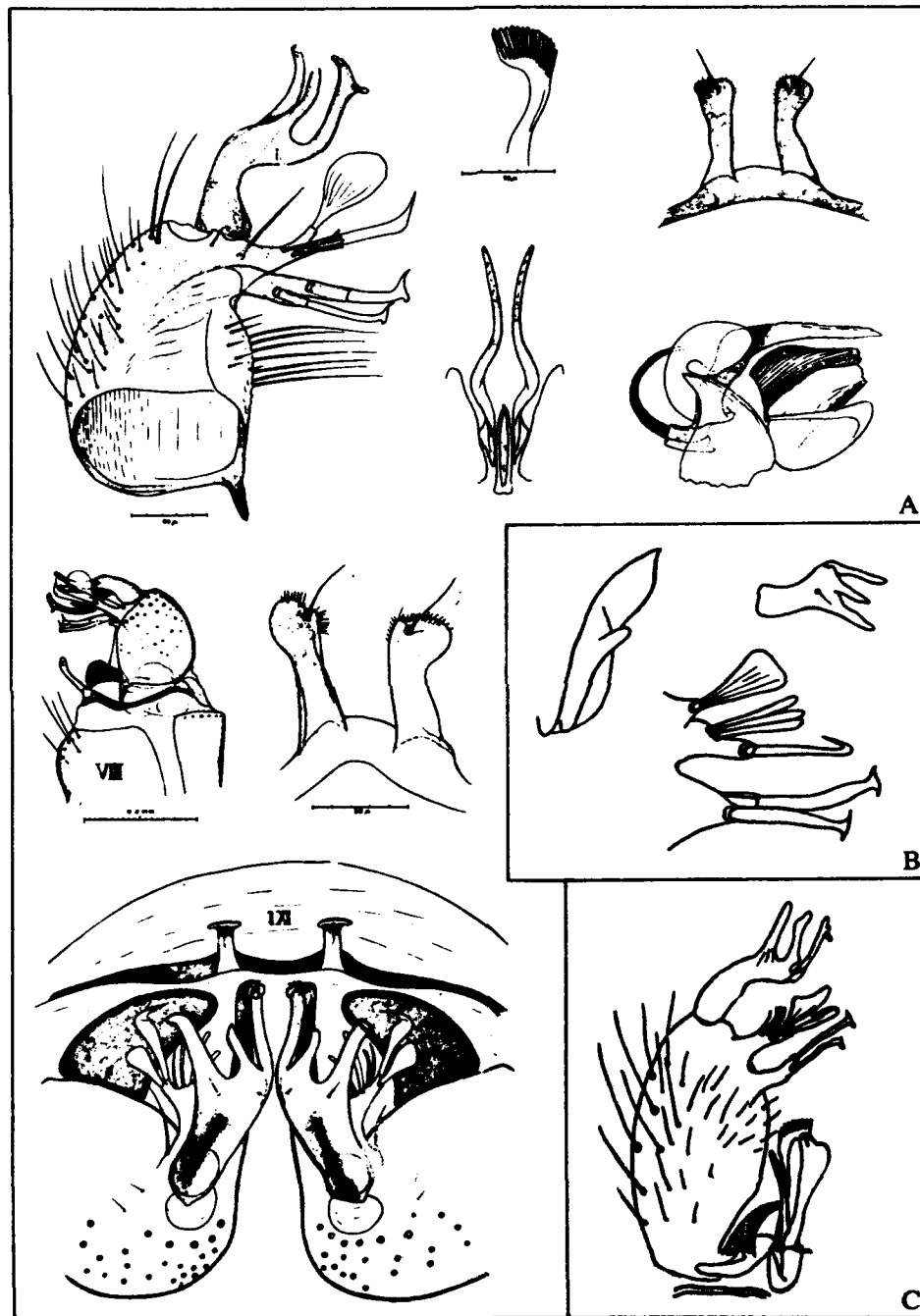


Fig. 113. *Culex triffidus*: A, Dampf 1941; B, Lane 1953; C, Dyar 1921d.

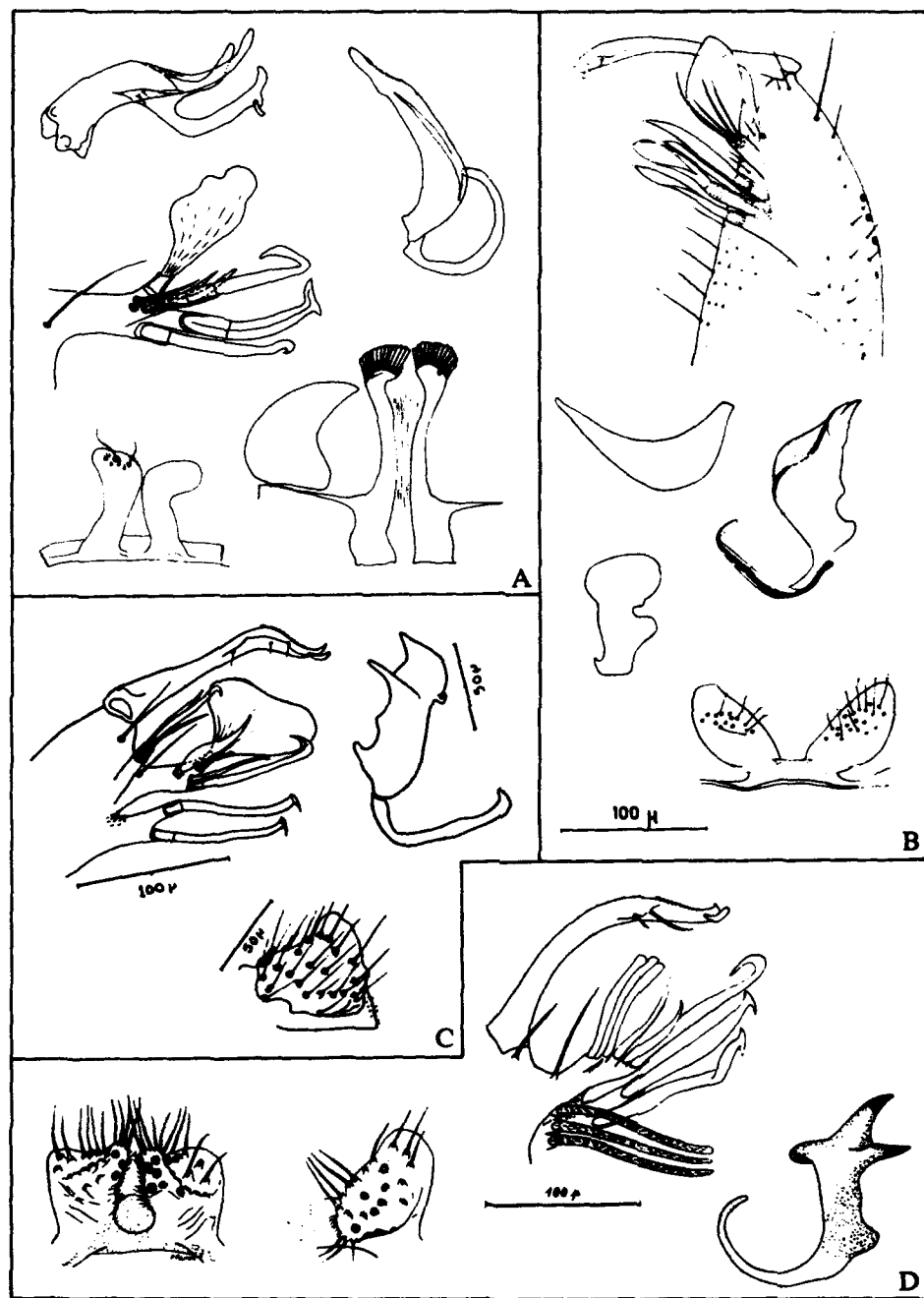


Fig. 114. A, *Culex triffidus*: Sirivanakarn 1983. B, *Culex trigeminatus*: Clastrier 1970a. C, *Culex trilobulatus*: Duret and Barreto 1956. D, *Culex trisetosus*: Fauran 1961a.



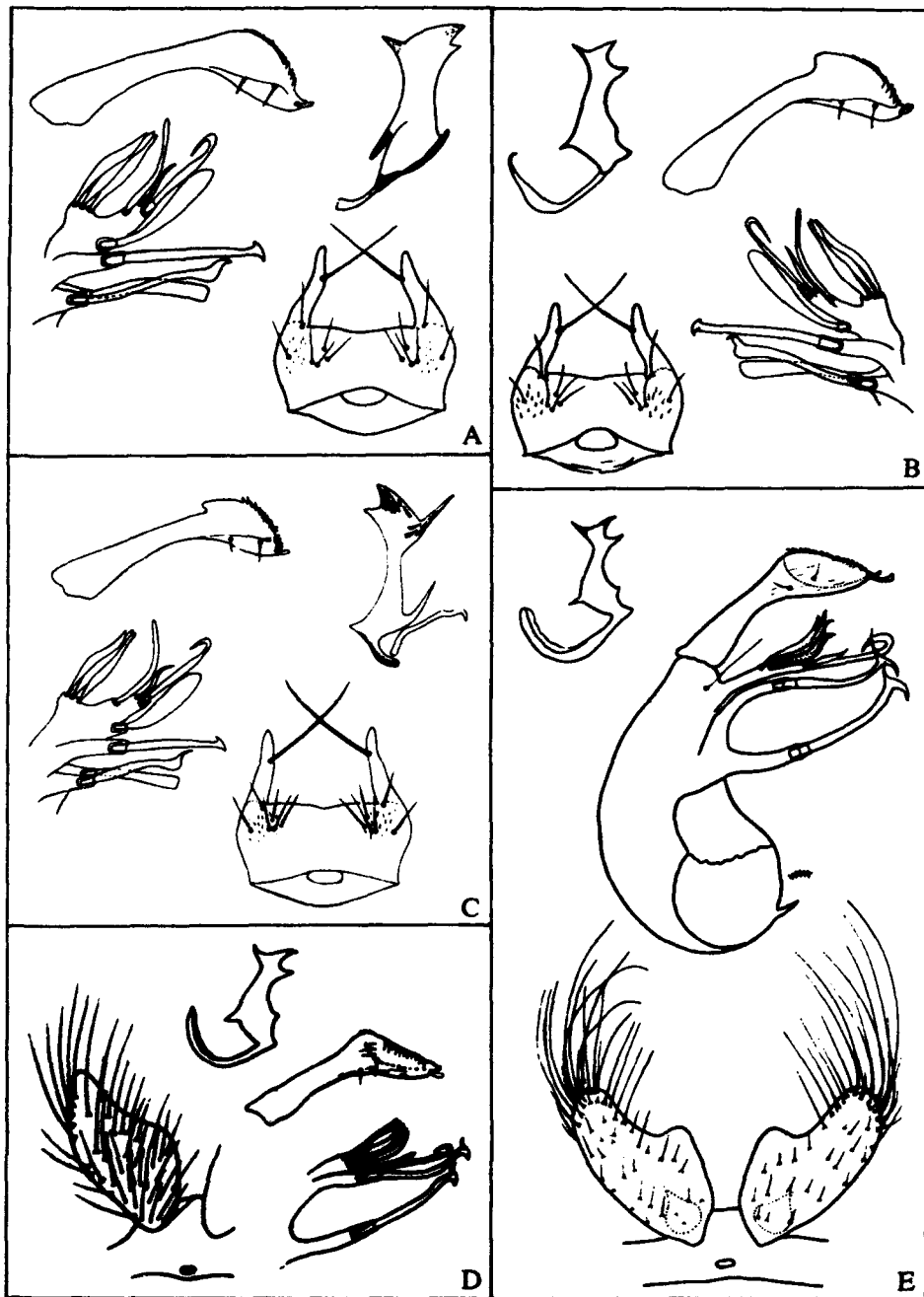
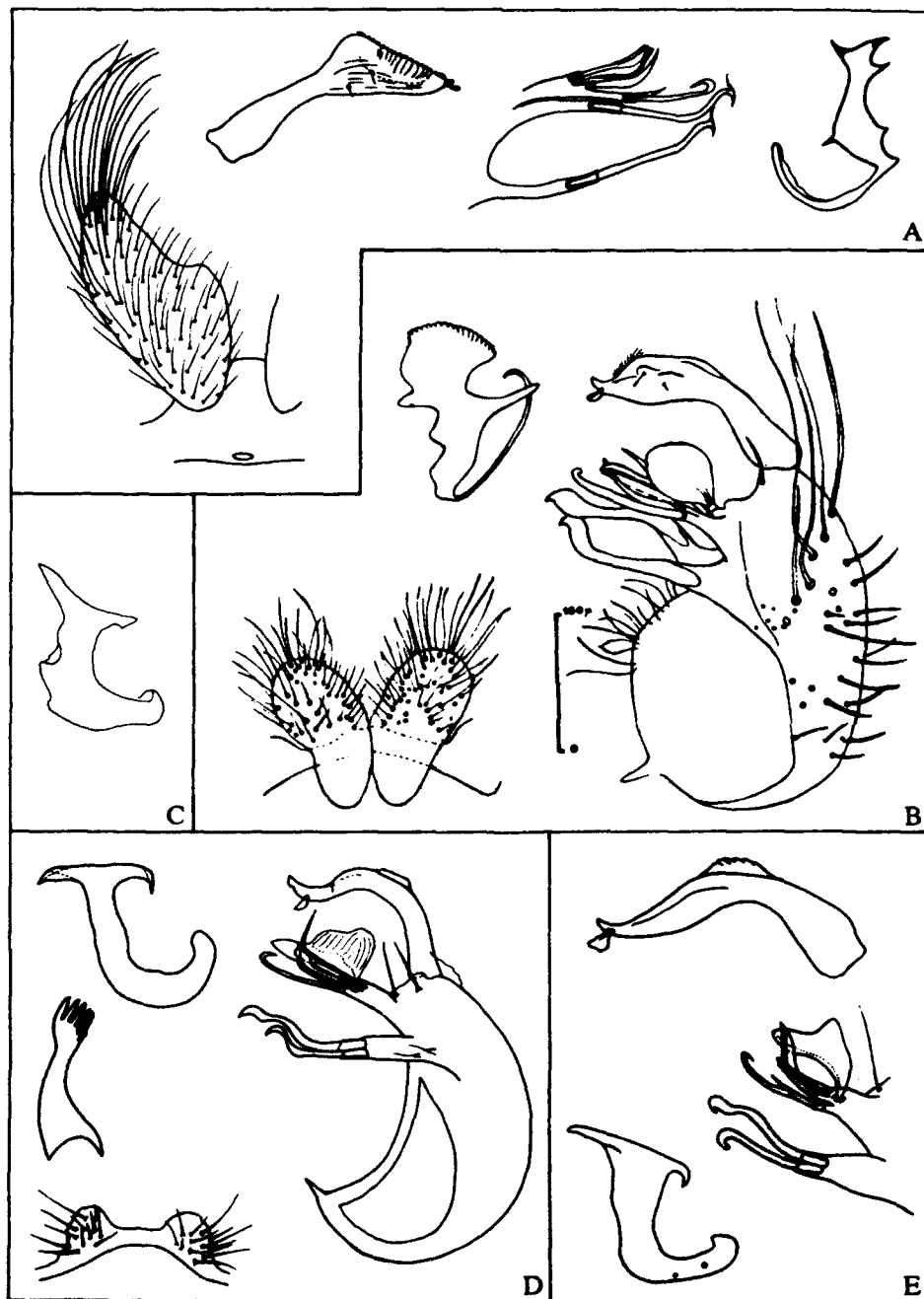


Fig. 115. A-C, *Culex unicornis*: A, Lane 1953; B, Rozeboom and Komp 1950; C, Cova Garcia, Sutil and Rausseo 1966a. D,E, *Culex vexillifer*: D, Lane 1953; E, Komp 1936b.



**Fig. 116.** A, *Culex vexillifer*: Rozeboom and Komp 1950. B, *Culex vidali*: Floch and Fauran 1954. C-E, *Culex vomerifer*: C, Sirivanakarn 1983; D, Komp 1932; E, Forattini 1965.

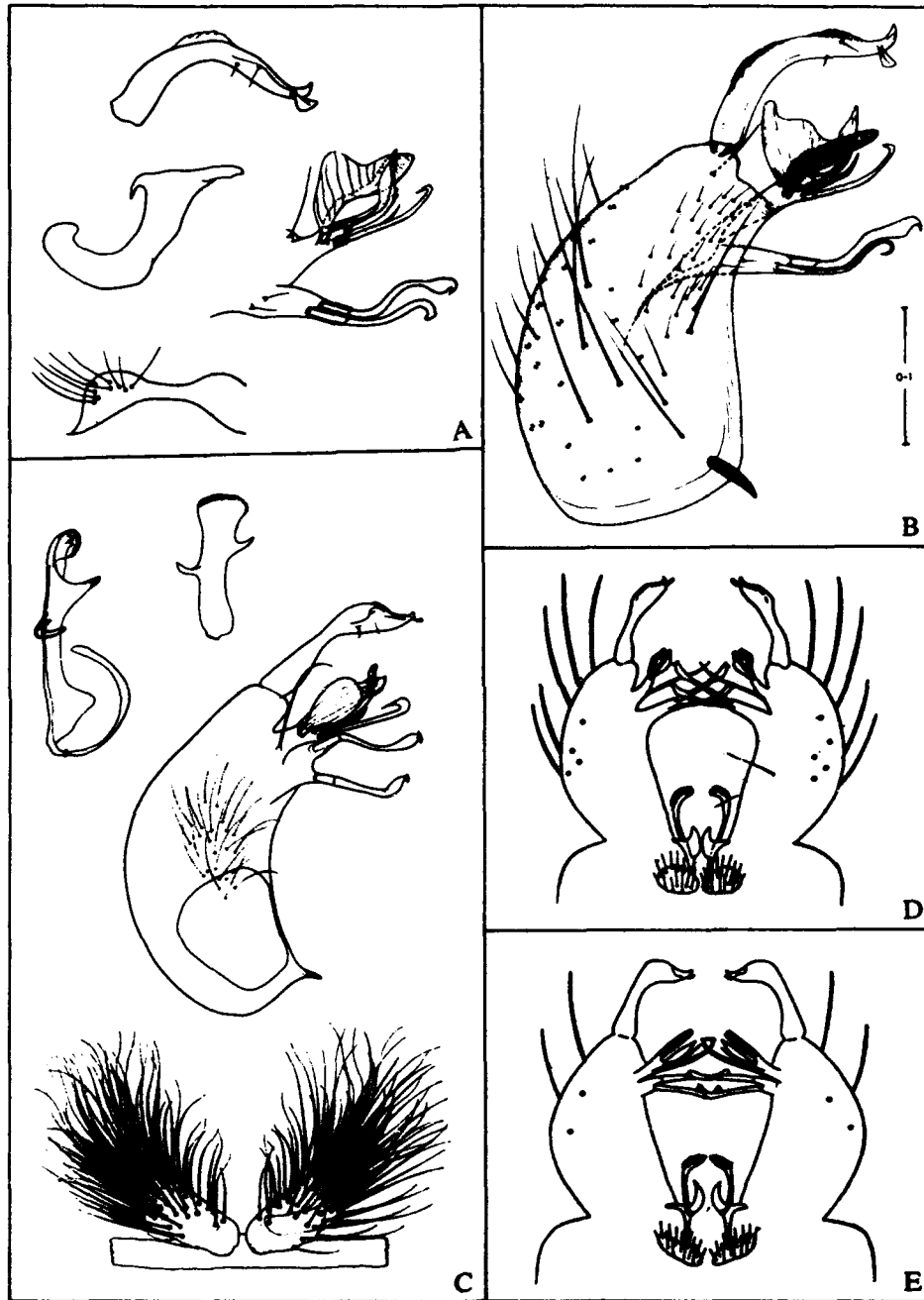
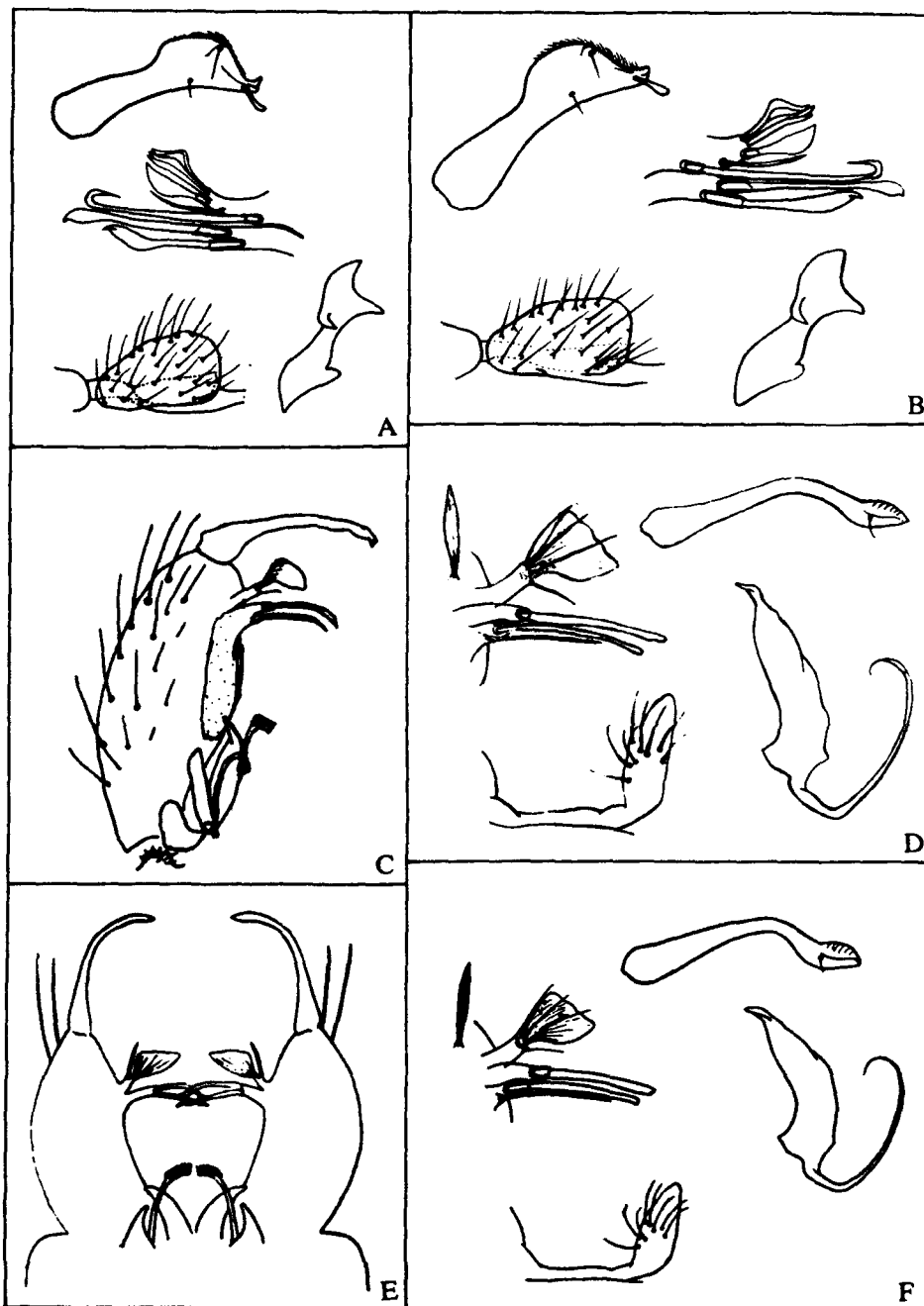


Fig. 117. A,B, *Culex vomerifer*: A, Rozeboom and Komp 1950; B, Sirivanakarn and Jakob 1982a. C, *Culex wepsterae*: Komp and Rozeboom 1951. D,E, *Culex ybarnis*: D, Dyar 1928; E, Dyar 1928 (as *jonistes*).



**Fig. 118.** A,B, *Culex ybarmis*: A, Rozeboom and Komp 1950; B, Lane 1953. C-F, *Culex zeteki*: C, Dyar 1923d; D, Cova Garcia, Sutil and Rausseo 1966a; E, Dyar 1928; F, Rozeboom and Komp 1950.

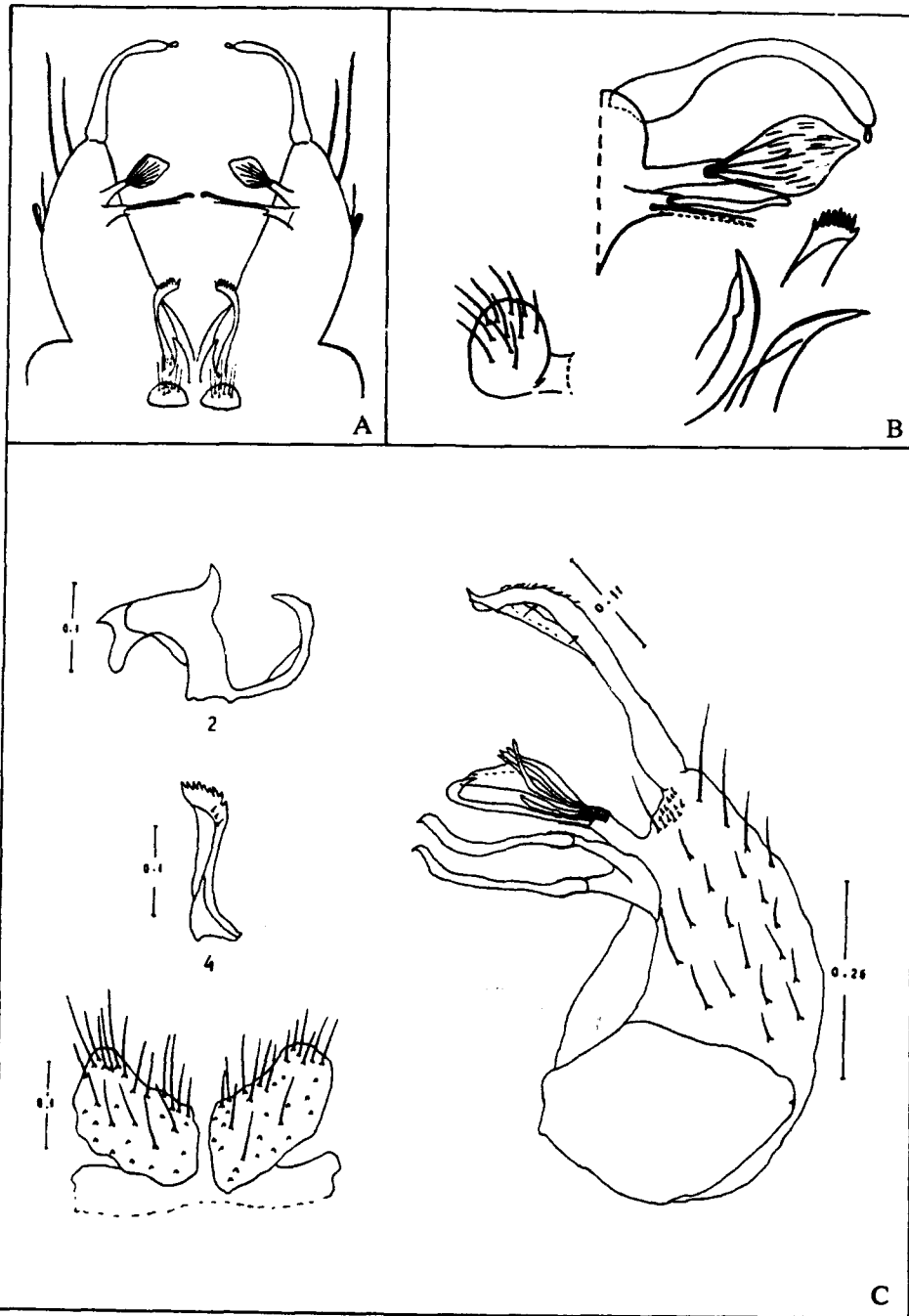


Fig. 119. A,B, *Culex zeteki*: A, Dyar 1928 (as *loturas*); B, Lane 1953; C, *Culex guedesi*: da Silva Mattos and Xavier 1991.

## TAXONOMIC INDEX

Valid names are in **boldface type**; invalid names (junior synonyms, junior homonyms, and erroneous spellings) are in *italic type*. **Boldface numbers** refer to entries in the catalog *per se*, *italic numbers* to names associated with figures, and numbers in roman type refer to secondary text references.

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