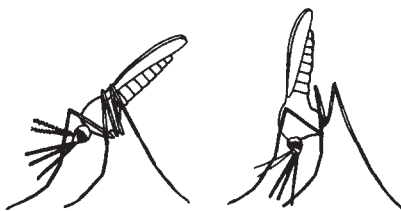
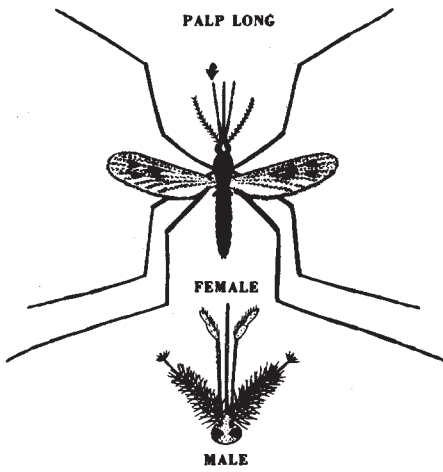
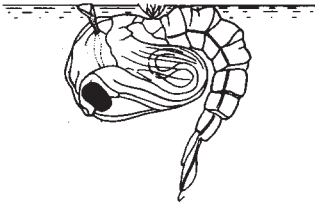
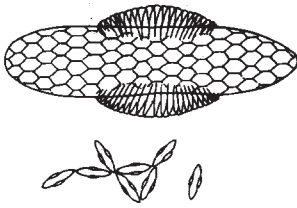


MOSQUITOES: CHARACTERISTICS OF ANOPHELINES AND CULICINES

Kent S. Littig and Chester J. Stojanovich

ANOPHELES

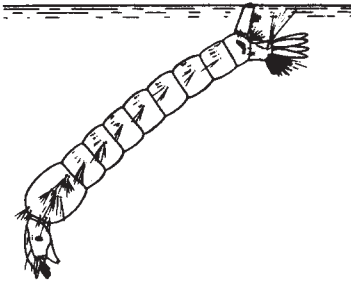


AEDES

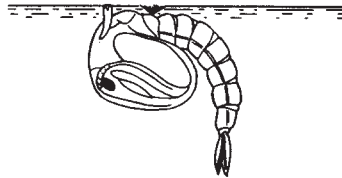
Egg



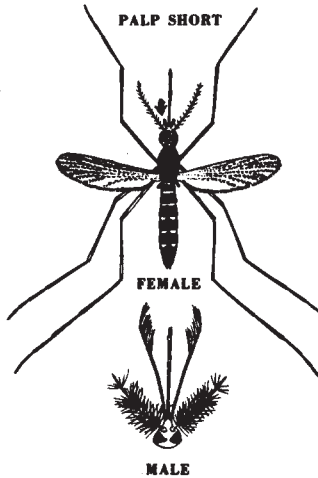
Larva



Pupa



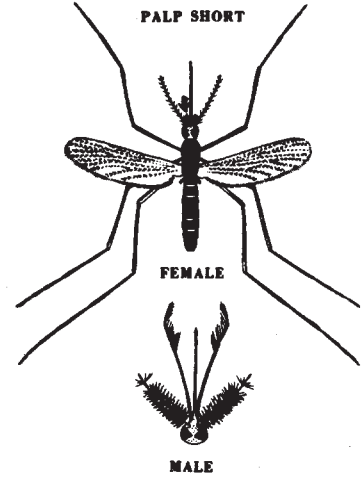
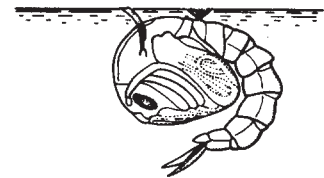
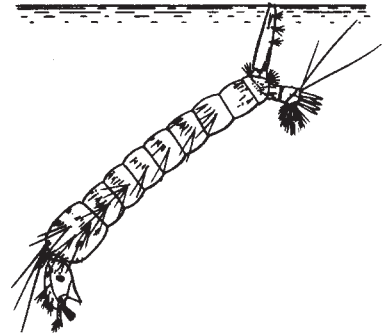
Adult



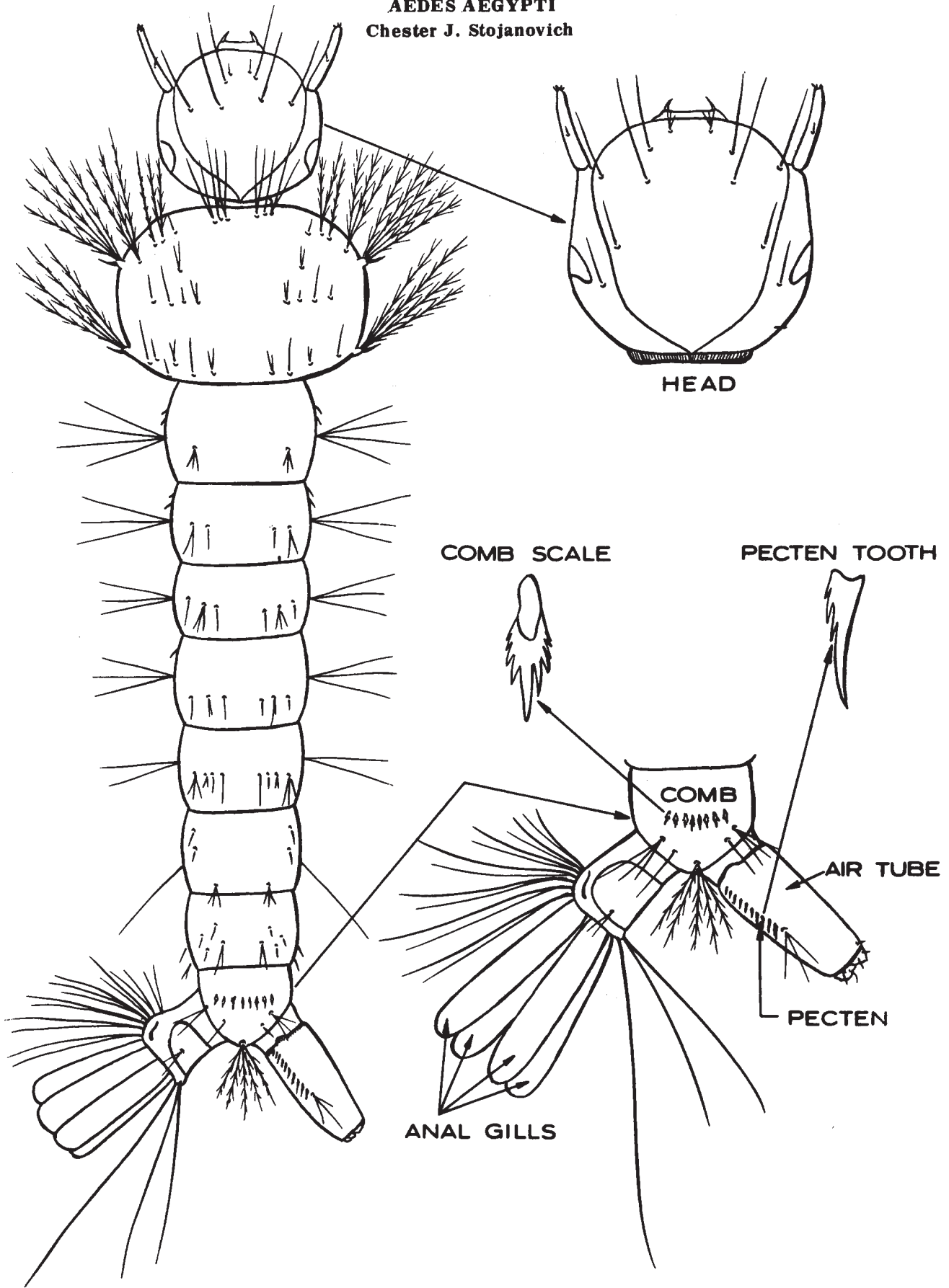
Resting Position



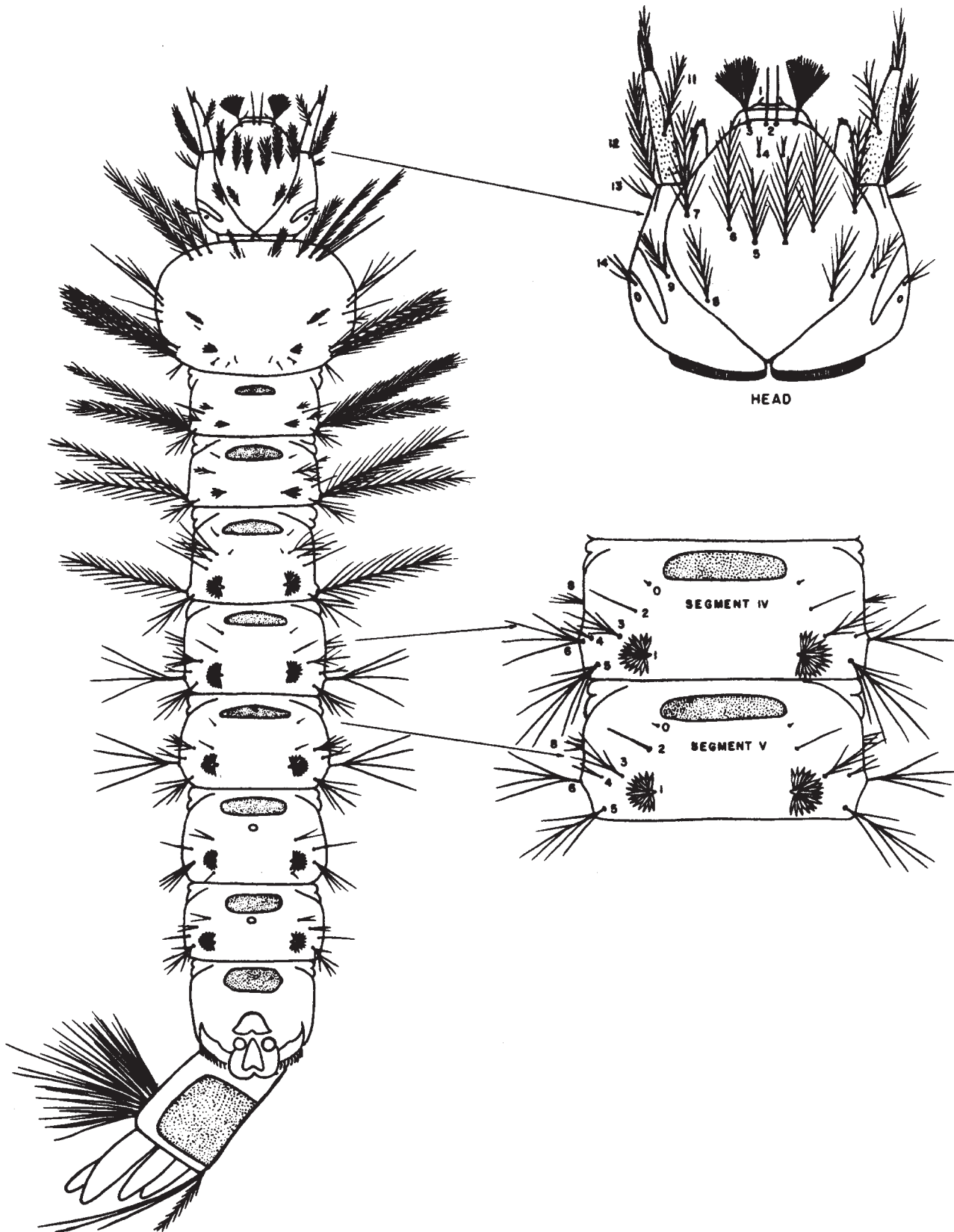
CULEX



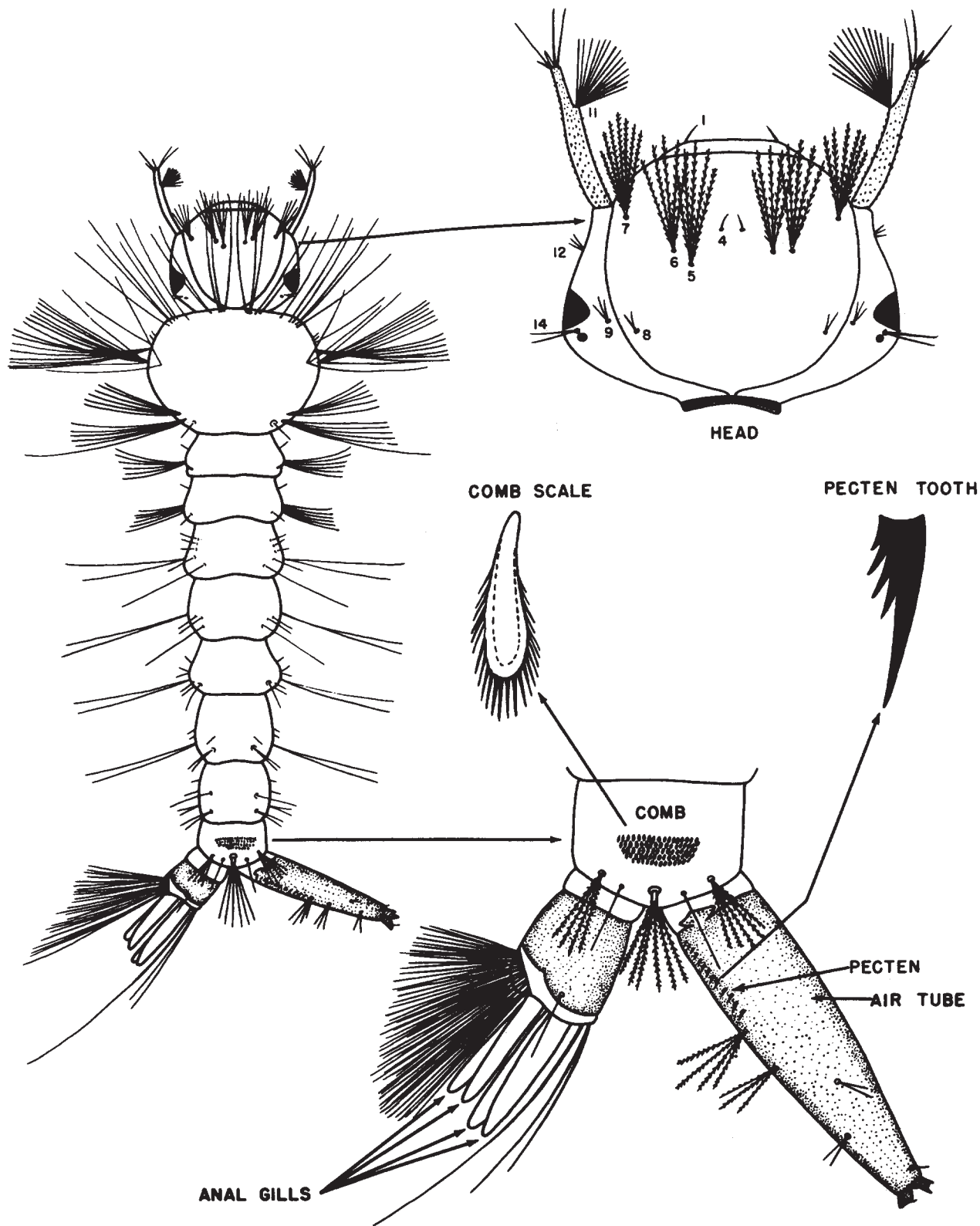
AEDES AEGYPTI
Chester J. Stojanovich



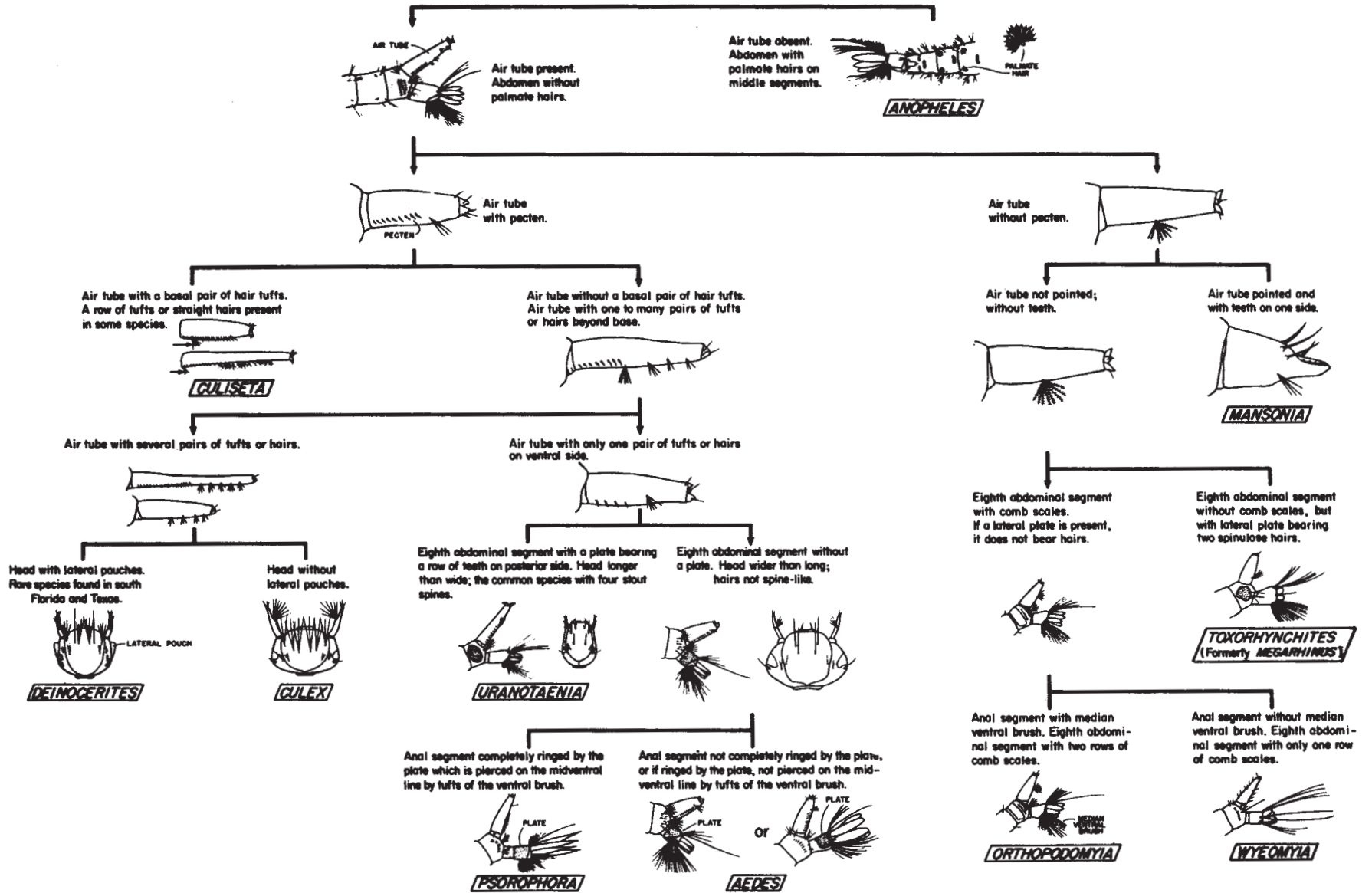
ANOPHELES QUADRIMACULATUS
Harry D. Pratt



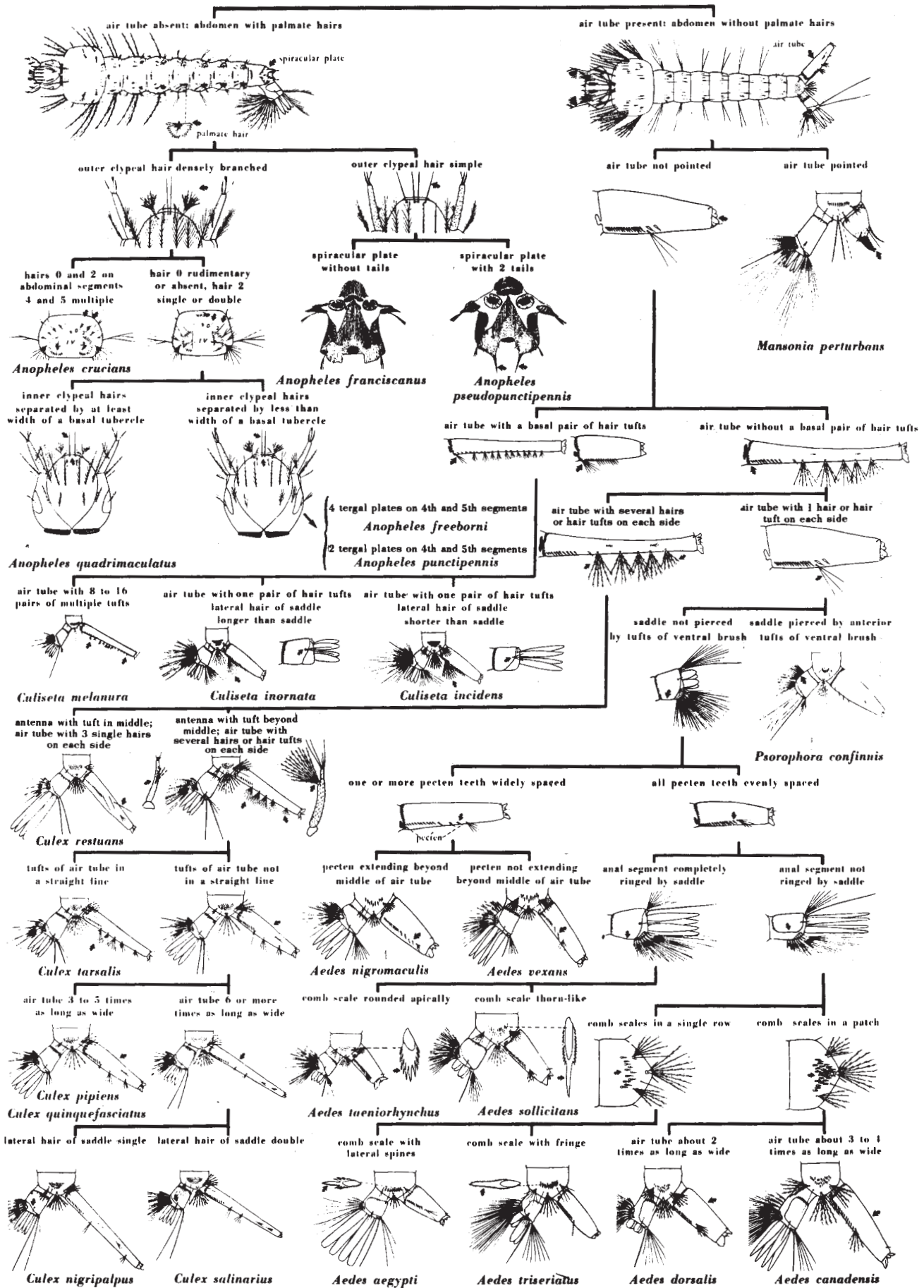
CULEX QUINQUEFASCIATUS
Harry D. Pratt



MOSQUITOES: PICTORIAL KEY TO U.S. GENERA OF LARVAE
Harry D. Pratt



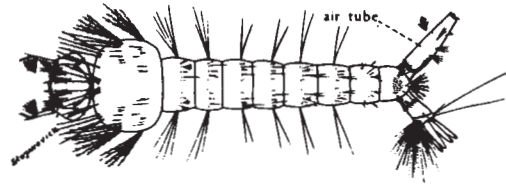
Chester J. Stojanovich and Harry D. Pratt



MOSQUITOES: PICTORIAL KEY TO SOME COMMON LARVAE OF WESTERN UNITED STATES

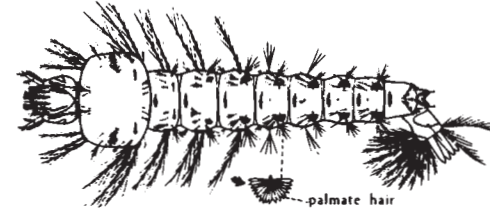
Harry D. Pratt

Air tube present at tip of abdomen; palmate hairs absent on middle abdominal segments.



CULICINE MOSQUITOES

Air tube absent at tip of abdomen; palmate hairs present on middle abdominal segments.



WESTERN MALARIAL MOSQUITO
Anopheles freeborni

Air tube with several tufts on each side.
GENUS *Culex*



Air tube with a tuft at base on each side.
GENUS *Culiseta*



Air tube with a tuft beyond base on each side.
GENUS *Aedes*



Air tube with 5 or more tufts on each side.



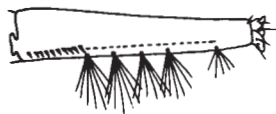
ENCEPHALITIS MOSQUITO
Culex tarsalis

Air tube with 4 tufts on each side.

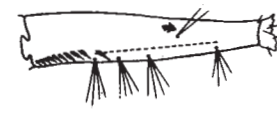


HOUSE MOSQUITO
Culex pipiens

All tufts on each side inserted in a straight line.

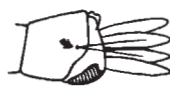


One or more tufts on each side out of line.



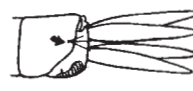
Culex peus

Lateral hair of anal segment as long as, or longer than, anal segment, stout.



Culiseta inornata

Lateral hair of anal segment shorter than anal segment, fine.



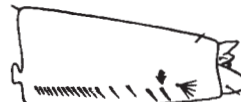
Culiseta incidens

Pecten teeth extend to about middle of air tube.



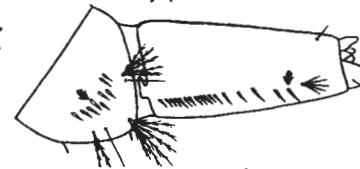
Aedes vexans

Pecten teeth extend much beyond middle of air tube.



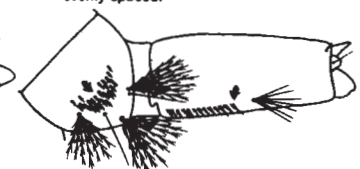
Aedes nigromaculis

5-14 comb scales on 8th abdominal segment; last tooth of pecten on air tube widely spaced.



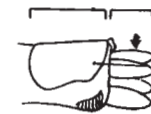
Aedes dorsalis

20-50 comb scales on 8th abdominal segment; last tooth of pecten on air tube evenly spaced.



Aedes sticticus

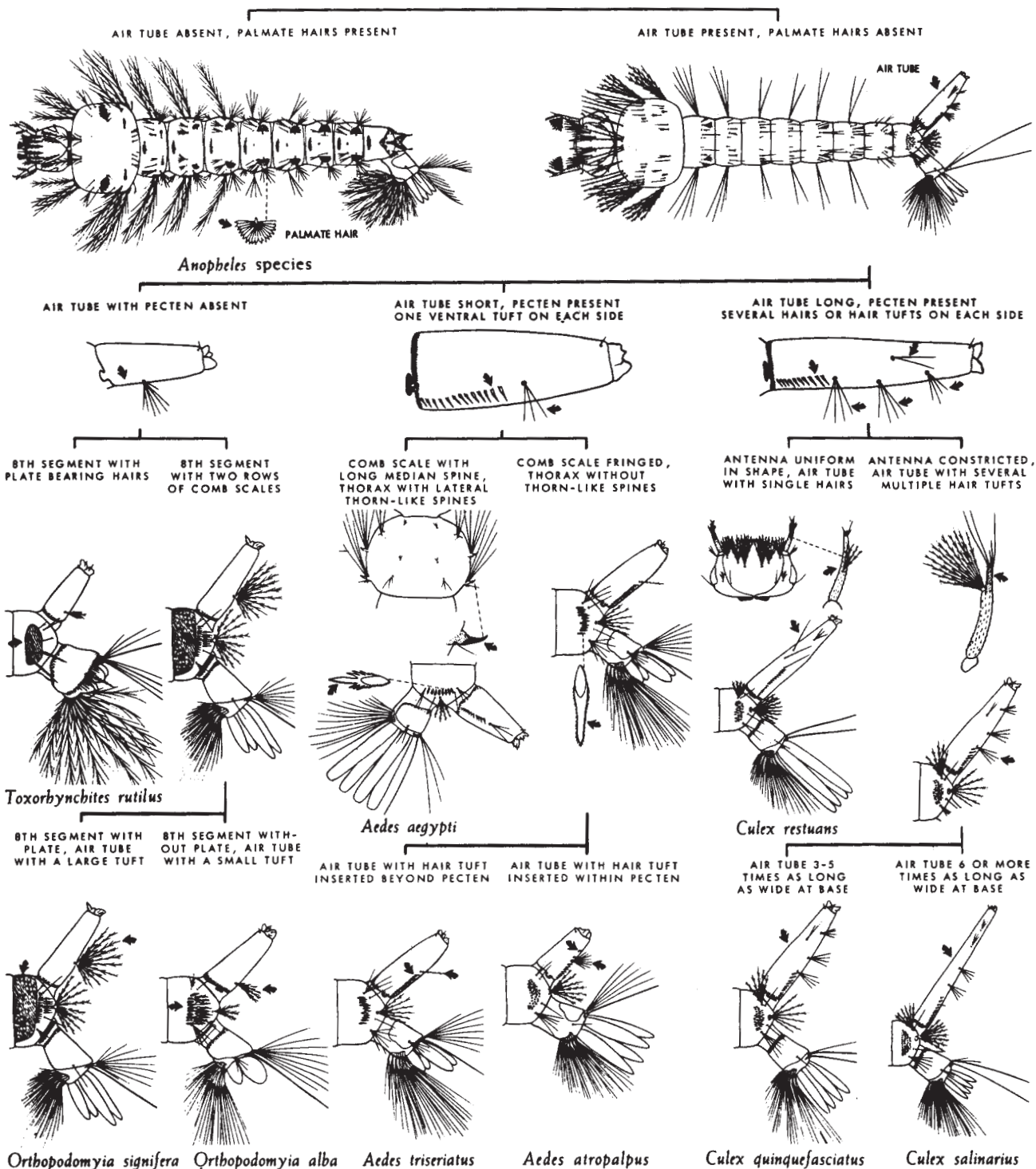
Anal gills shorter than anal segment.



Anal gills longer than anal segment.

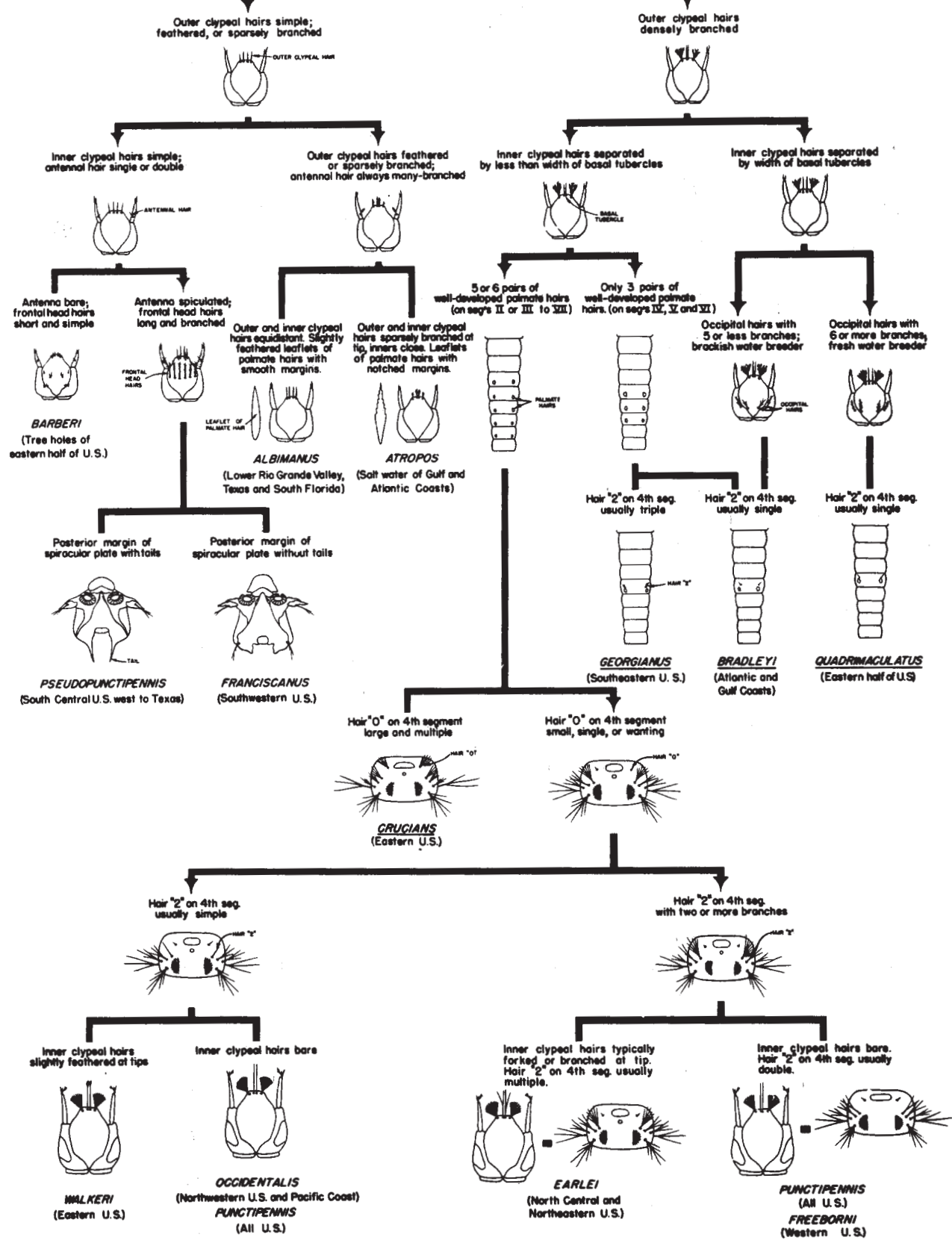


**MOSQUITOES: PICTORIAL KEY TO SOME LARVAE
COMMONLY FOUND IN ARTIFICIAL CONTAINERS**
Harry D. Pratt and Chester J. Stojanovich

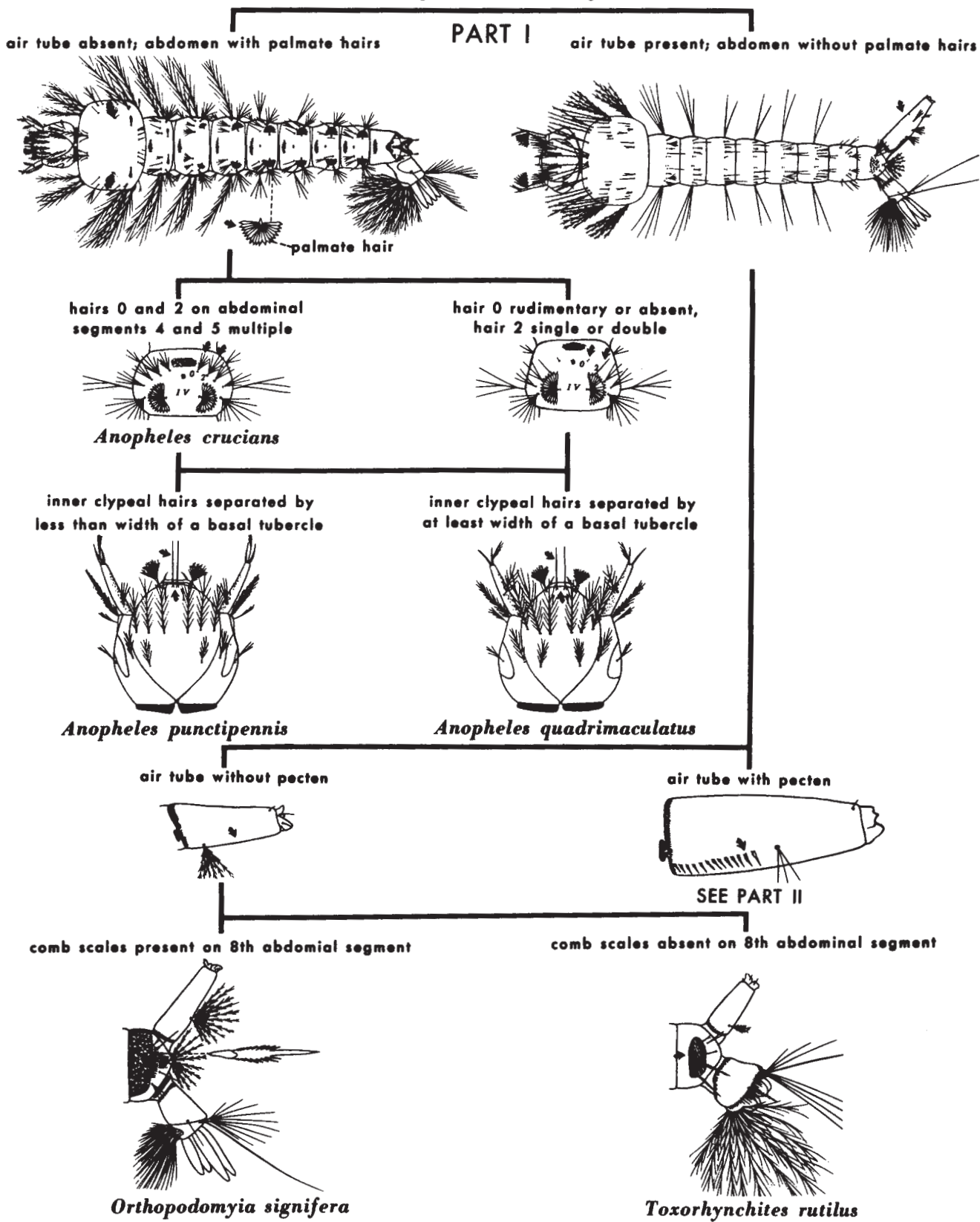


MOSQUITOES: PICTORIAL KEY TO ANOPHELINE LARVAE OF THE UNITED STATES

Stanley B. Freeborn and Eugene J. Gerberg



**MOSQUITOES: PICTORIAL KEY TO SOME LARVAE OF FLORIDA
COMMONLY FOUND IN CONTAINERS**
Chester J. Stojanovich and Harry D. Pratt



PART II

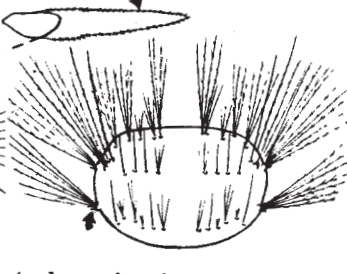
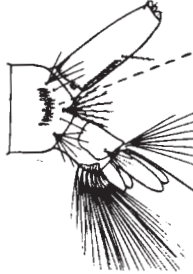
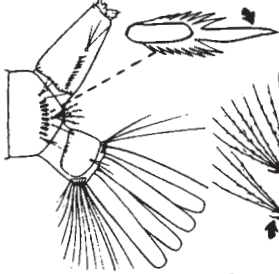
air tube with one hair or tuft on each side

air tube with several hairs or tufts on each side



comb scales with a strong median spine, thorax with prominent lateral spines

comb scales with a fringe, thorax with less prominent lateral spines

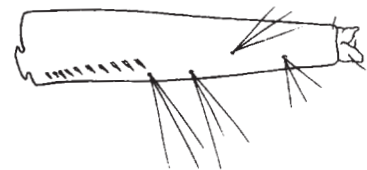


Aedes aegypti

Aedes triseriatus

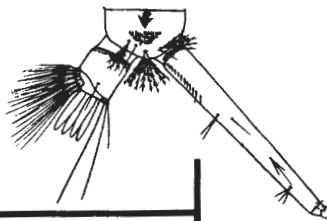
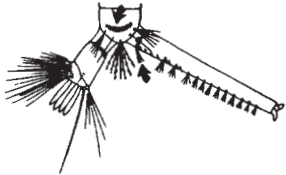
air tube at least 6 times as long as wide

air tube 3-5 times as long as wide



comb scales in a single row, air tube with a basal tuft

comb scales in a patch, air tube without a basal tuft



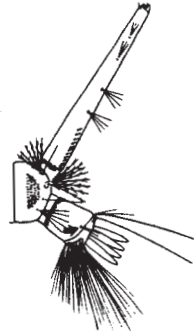
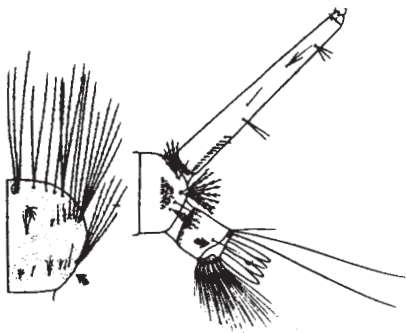
Culiseta melanura

thorax with spicules, lateral hair of saddle single

thorax without spicules, lateral hair of saddle double

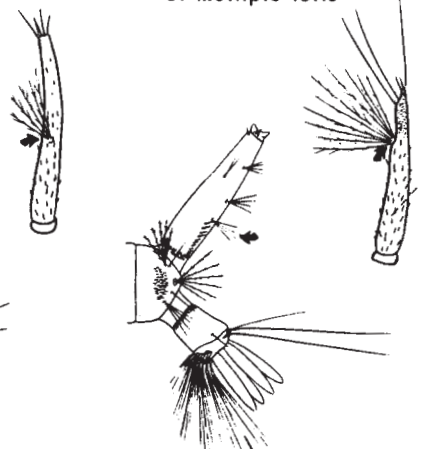
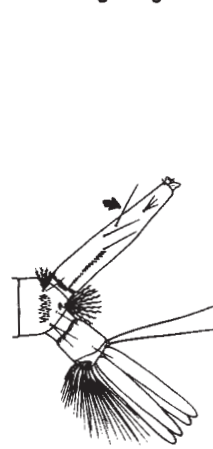
antenna with tuft inserted at middle, air tube with 3 pairs of long single hairs

antenna with tuft inserted beyond middle, air tube with 4 pairs of multiple tufts



Culex nigripalpus

Culex salinarius

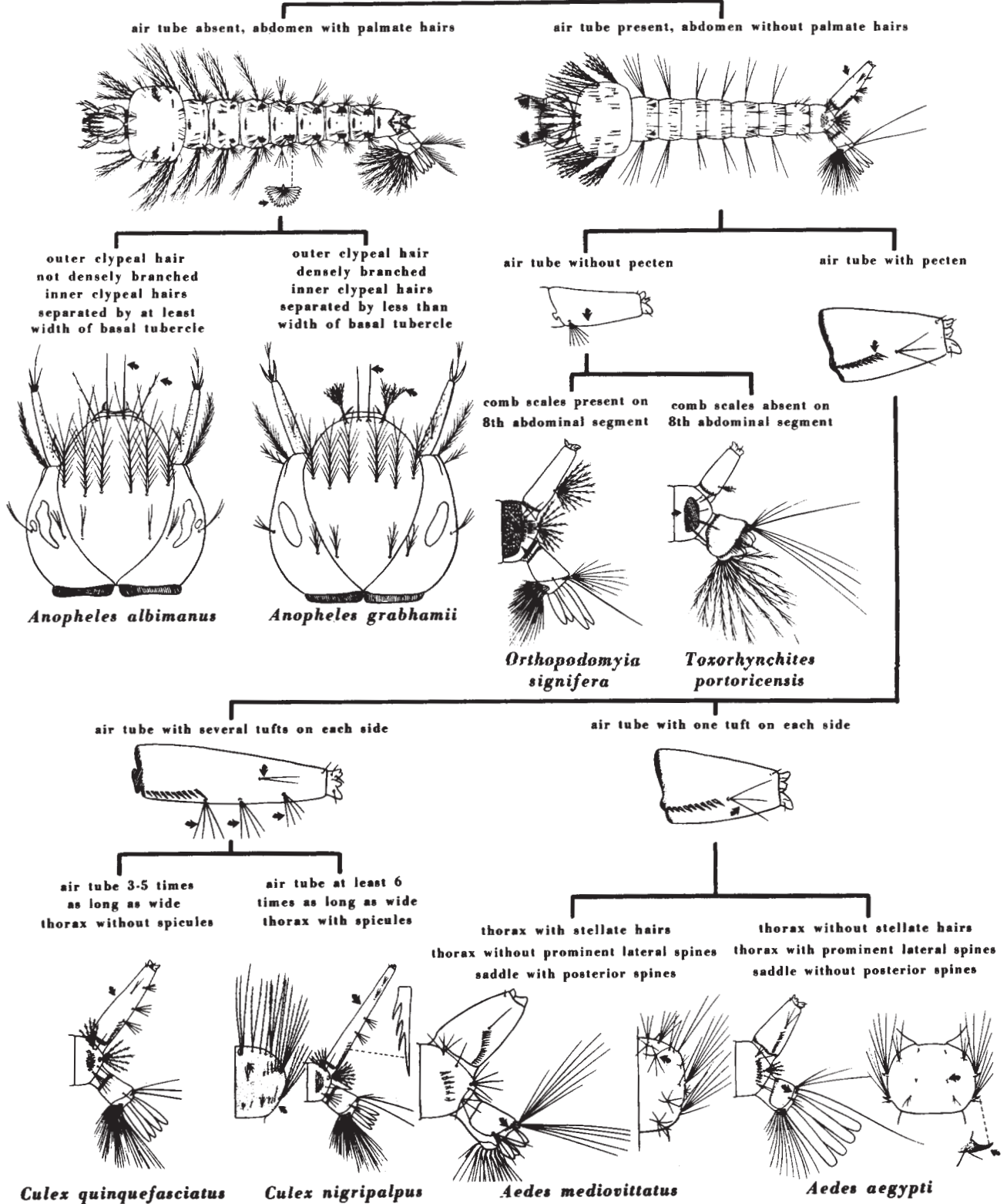


Culex restuans

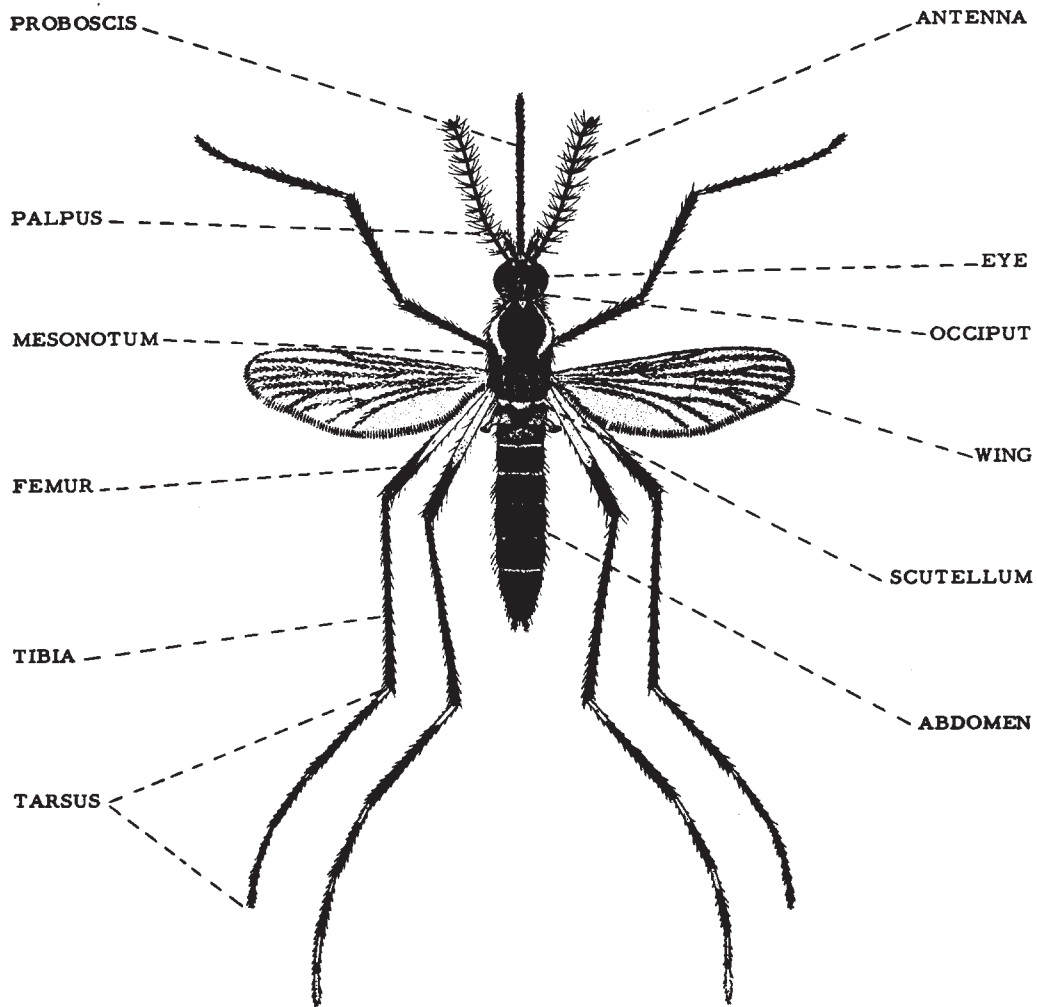
Culex quinquefasciatus

**MOSQUITOES: PICTORIAL KEY TO SOME COMMON LARVAE OF PUERTO RICO
FOUND IN CONTAINERS**

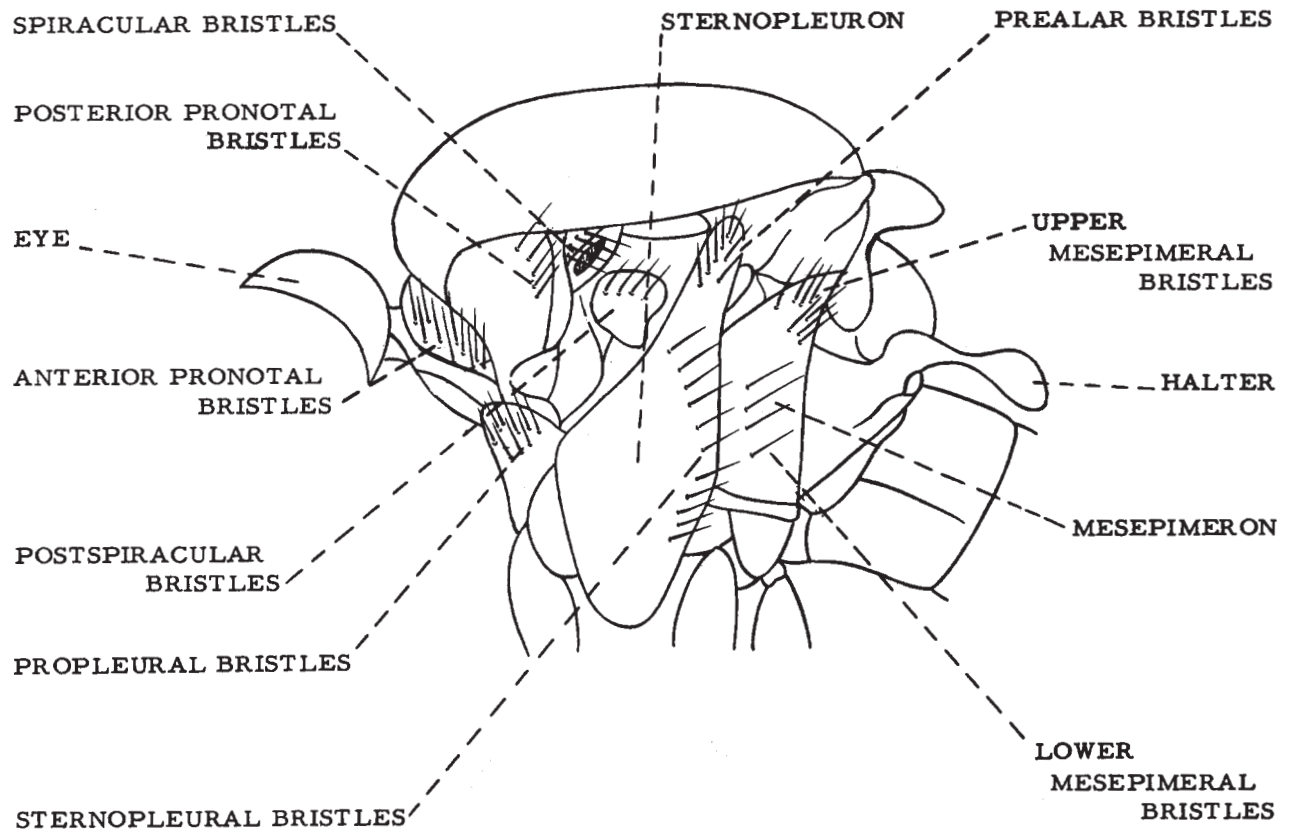
Harry D. Pratt and Chester J. Stojanovich



MOSQUITO DIAGRAM – ADULT FEMALE AEADES
Chester J. Stojanovich and Harold George Scott

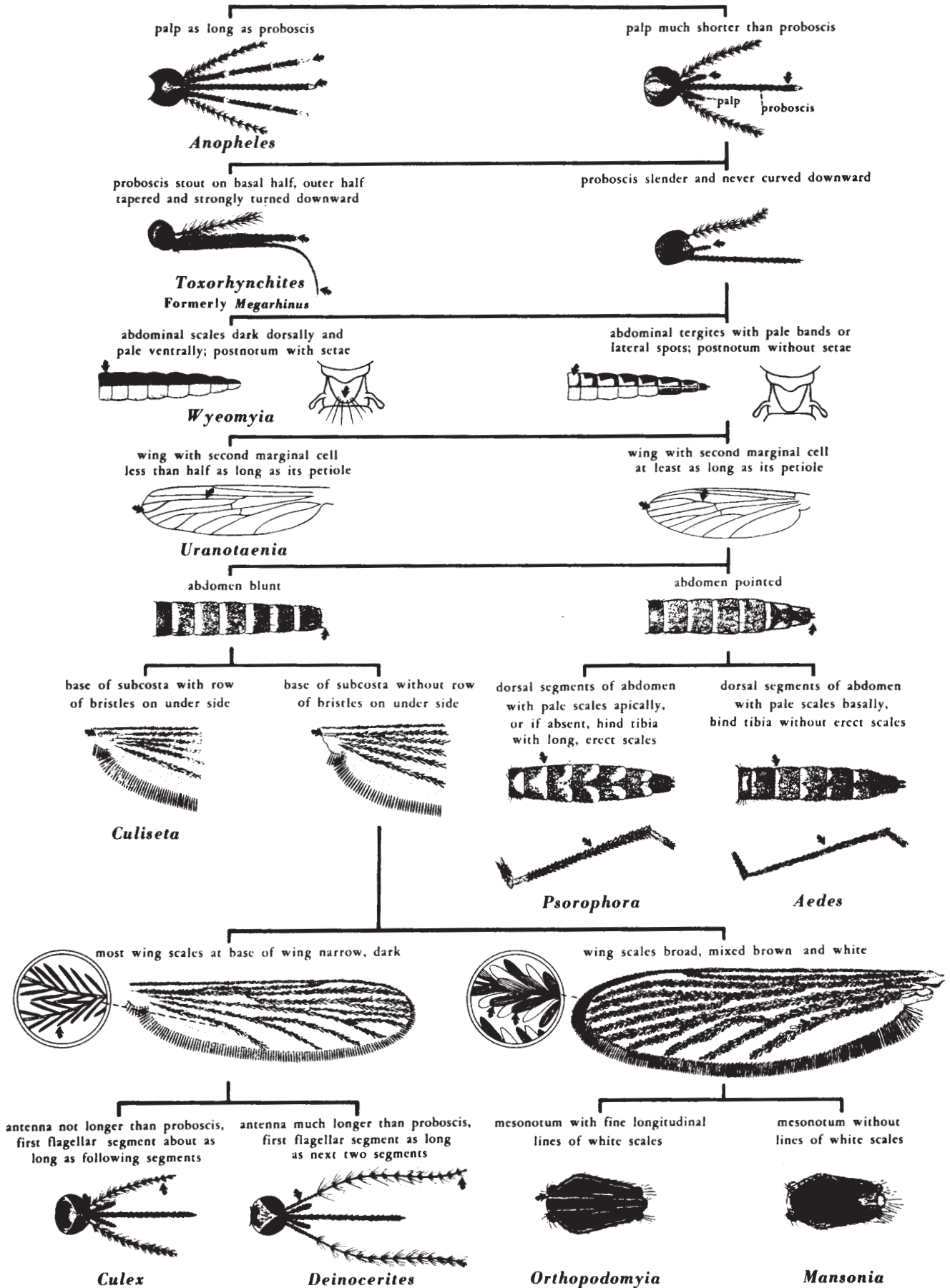


MOSQUITO DIAGRAM – LATERAL ASPECT OF MOSQUITO THORAX
Chester J. Stojanovich



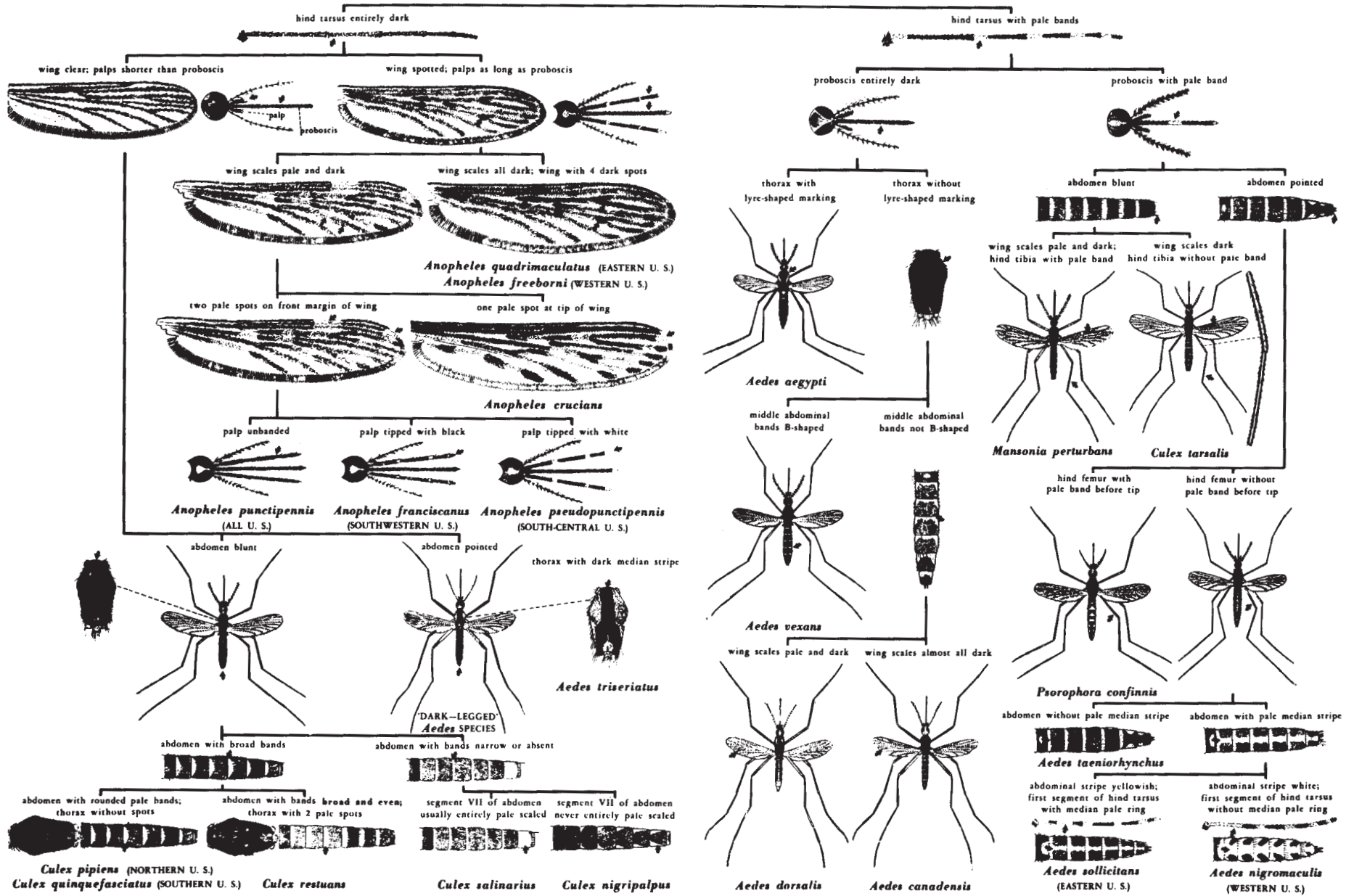
MOSQUITOES: PICTORIAL KEY TO UNITED STATES GENERA OF ADULTS (FEMALE)

Harry D. Pratt and Chester J. Stojanovich



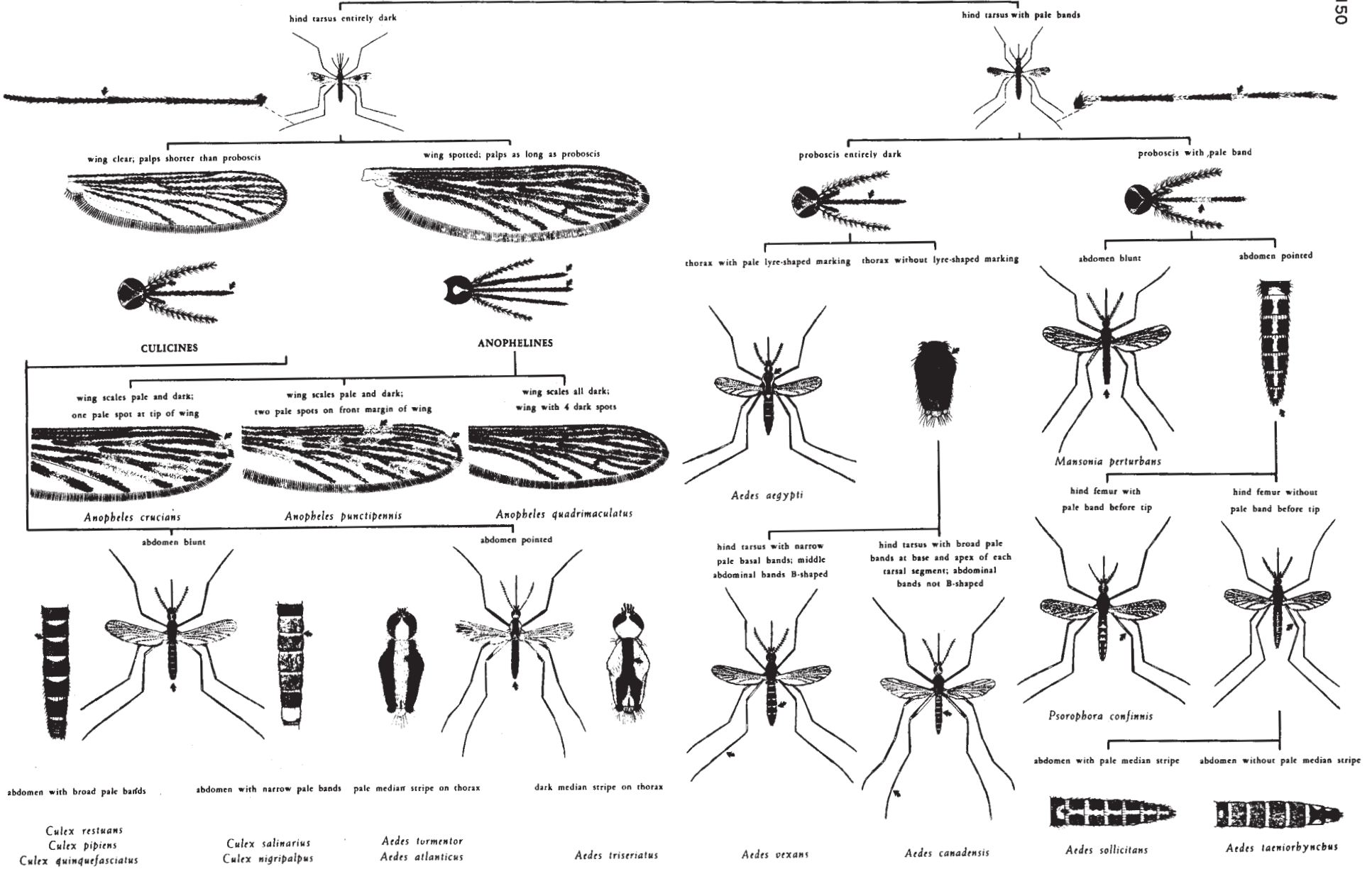
MOSQUITOES: PICTORIAL KEY TO SOME COMMON ADULTS (FEMALE) OF THE UNITED STATES

Harry D. Pratt and Chester J. Stojanovich

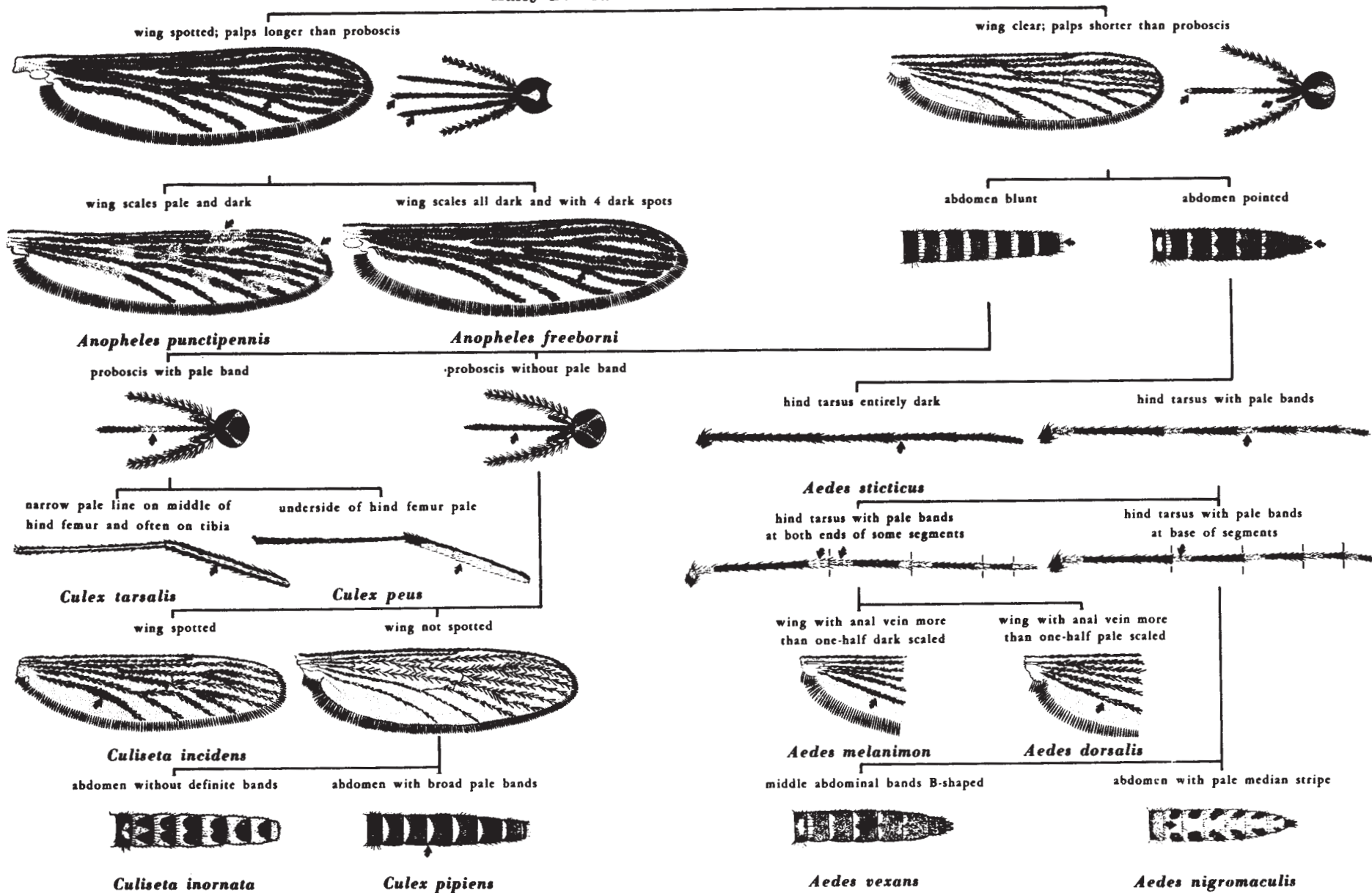


MOSQUITOES: PICTORIAL KEY TO SOME ADULTS (FEMALE) IN EASTERN UNITED STATES

Harry D. Pratt and Chester J. Stojanovich



MOSQUITOES: PICTORIAL KEY TO SOME COMMON ADULTS (FEMALE) OF WESTERN UNITED STATES
 Harry D. Pratt and Chester J. Stojanovich



MOSQUITOES: PICTORIAL KEY TO SOME ADULTS COMMONLY ASSOCIATED WITH Aedes Aegypti

Harry D. Pratt and Chester J. Stojanovich

PROBOSCIS CURVED, LARGE MOSQUITOES WITH BRILLIANT GREENISH TO PURPLISH COLOR

PROBOSCIS STRAIGHT, SMALLER MOSQUITO USUALLY WITH BLACKISH OR BROWNISH COLOR



Toxorhynchites rutilus



HIND Tarsi WITH PALE BANDS

HIND Tarsi WITHOUT PALE BANDS



MESONOTUM WITH LYRE-SHAPED MARKING, HIND Tarsi WITH PALE BASAL BANDS

MESONOTUM WITH DARK, BROAD, MEDIAN STRIPE, HIND Tarsi WITH PALE BASAL AND APICAL BANDS

MESONOTUM WITH PARALLEL LINES, HIND Tarsi WITH PALE BASAL AND APICAL BANDS



Aedes aegypti



Aedes atropalpus



Orthopodomyia species

SCUTELLUM SADDLE-SHAPED, ABDOMEN WITHOUT SCALES OR PALE BANDS

SCUTELLUM TRI-LOBED, ABDOMEN WITH SCALES AND USUALLY WITH PALE BANDS



MESONOTUM WITH BROAD DARK MEDIAN STRIPE, ABDOMEN POINTED

MESONOTUM WITH TWO PALE SPOTS AND FINE COPPERY SCALES; ABDOMEN BLUNT WITH BASAL PALE BANDS ALMOST STRAIGHT

MESONOTUM ALMOST UNIFORM, SCALES COARSE AND BRASSY; ABDOMEN BLUNT WITH PALE BASAL BANDS ROUNDED

MESONOTUM ALMOST UNIFORM, SCALES FINE AND COPPERY; ABDOMEN BLUNT WITH BASAL PALE BANDS NARROW

MESONOTUM ALMOST UNIFORM, SCALES FINE AND COPPERY; ABDOMEN BLUNT WITH APICAL PALE BANDS



Aedes triseriatus



Culex restuans



Culex quinquefasciatus



Culex salinarius



Culex territans

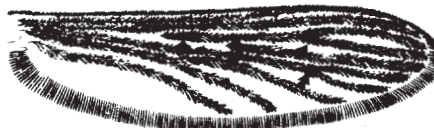
WING UNIFORMLY DARK

WING DARK WITH FOUR WELL-DEFINED DARK SPOTS

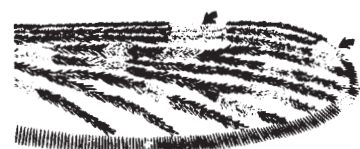
WING WITH PATCHES OF DARK AND PALE SCALES



Anopheles barberi



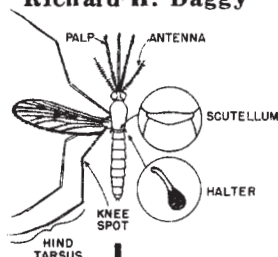
Anopheles quadrimaculatus



Anopheles punctipennis

MOSQUITOES: PICTORIAL KEY TO ADULT FEMALE ANOPHELINES OF UNITED STATES

Richard H. Daggy



Palps as long as proboscis
Scutellum evenly rounded
Wings usually spotted

GENUS
ANOPHELES

wings with areas of white or yellow scales

wings entirely dark-scaled

two pale areas on front margin of wing

one pale area on front margin of wing at tip

wings clear -unspotted

wings spotted more or less distinctly by clumping of dark scales



CRUCIANS
GEORGIANUS
BRADLEYI

These three species are indistinguishable as adults. See "Pictorial Key to Anopheline Larvae" for separation in that stage.

thoracic bristles long -about one-third the width of thorax

thoracic bristles normal -shorter than one-third the width of thorax



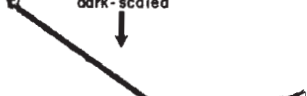
BARBERI
(Eastern U.S.)

ATROPOS
(Atlantic and Gulf Coasts)

Some specimens of *atropos* have faintly spotted wings. These are distinguished from other anophelines by the absence of light knee spots.

hind tarsus entirely dark-scaled

hind tarsus with broad white band



ALBIMANUS
(Lower Rio Grande valley of Texas)

palp with narrow white bands
halter knobs golden-yellow

palps unbanded
halter knobs dark



WALKERI
(Eastern U.S.)

palp banded

palp unbanded



PUNCTIPENNIS
(All of U.S.)

coppery-colored fringe spot at tip of wing

no fringe spot



OCCIDENTALIS
(Pacific Coast)
EARLEI
(Northern U.S. East of Rockies)

terminal segment of palp entirely white

terminal segment of palp tipped with black



PSEUDOPUNCTIPENNIS
(Southwestern U.S.)

FRANCISCANUS
(South-central and Western U.S.)

West of the Rockies (102° W. Longitude)

East of the Rockies

these two species are indistinguishable as adults
FREEBORNI
(Western U.S.)

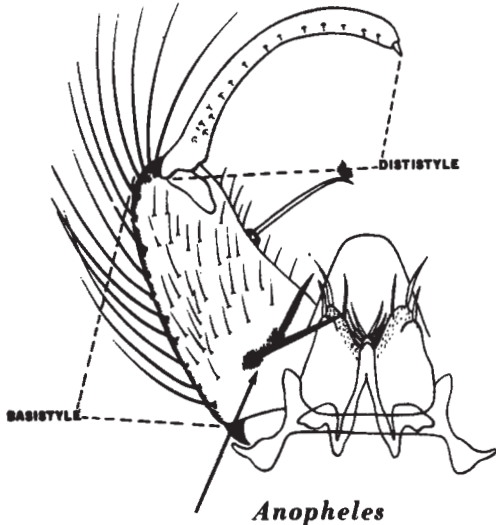
QUADRIMACULATUS
(Eastern U.S.)

MOSQUITOES: PICTORIAL KEY TO UNITED STATES GENERA
 BASED ON MALE GENITALIA
 PART I

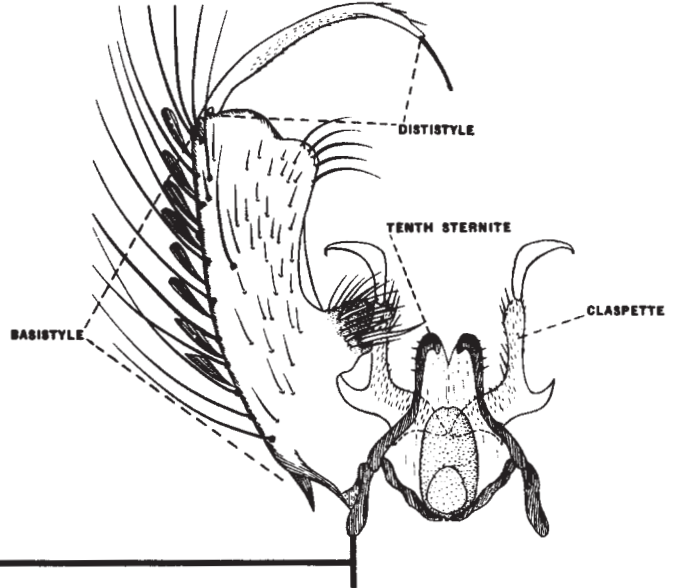
Chester J. Stojanovich

basistyle about equal in length to dististyle
 and with 1-2 stout setae near base

basistyle usually much shorter than dististyle,
 without 1-2 stout setae near base

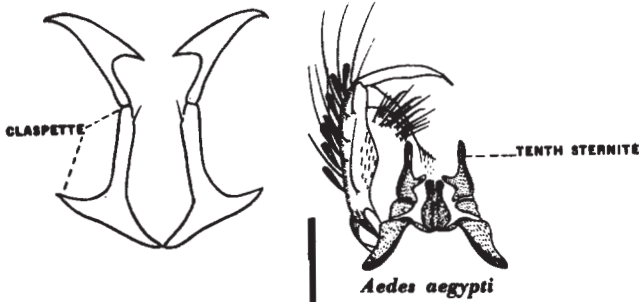


Anopheles

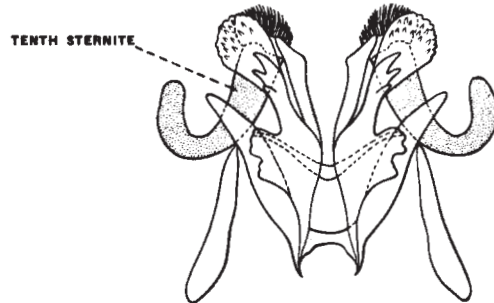


claspettes present 'absent only in *Aedes aegypti* as shown below'

claspette absent



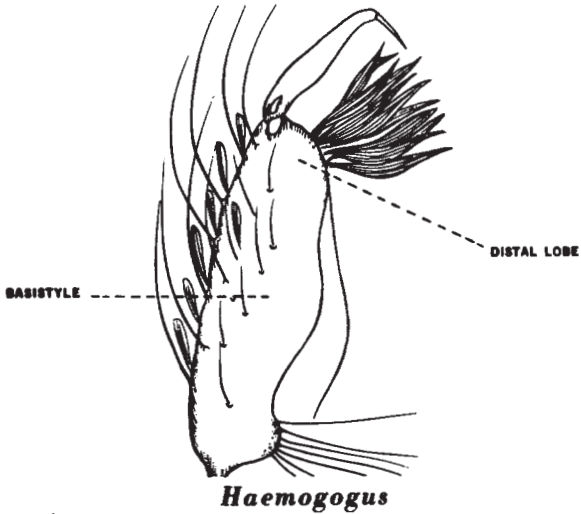
Aedes aegypti



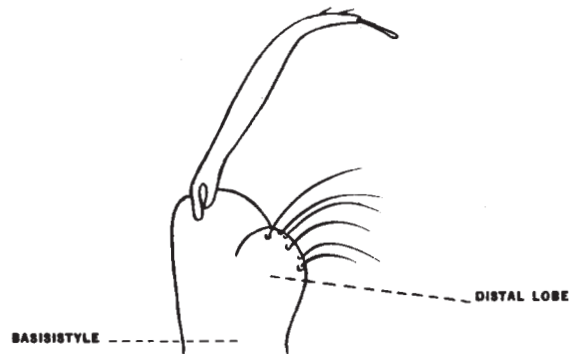
SEE PART II SECTION II

distal lobe of basistyle with leaf-like scales

distal lobe when present without leaf-like scales



Haemogogus



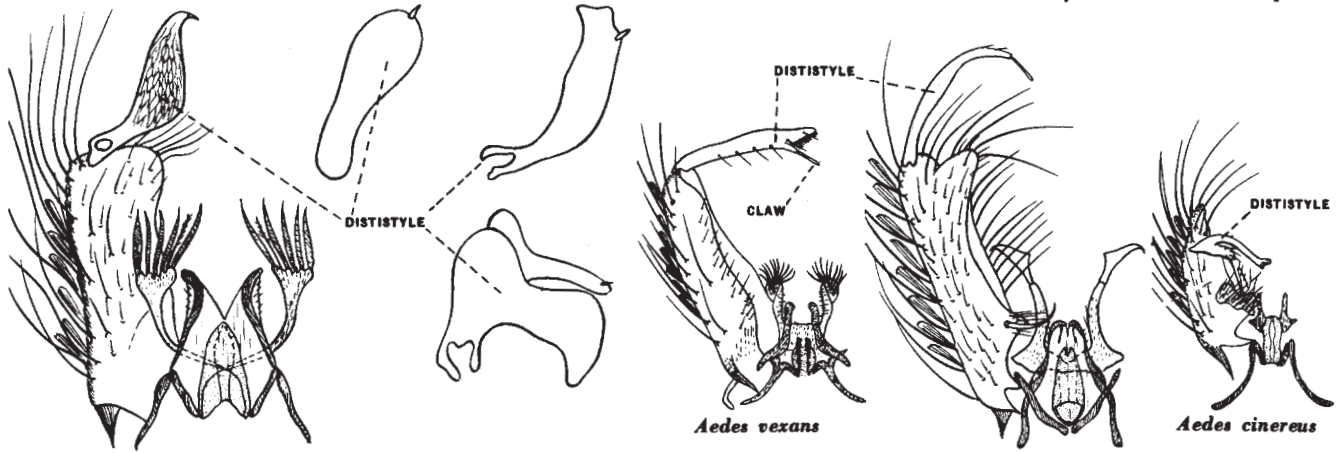
SEE PART II SECTION I

PART II

PART II SECTION I

dististyle not slender but variously shaped as shown below

dististyle slender 'exceptions being
Aedes cinereus with dististyle furcate at base and
Aedes vexans with claw of dististyle not inserted at tip



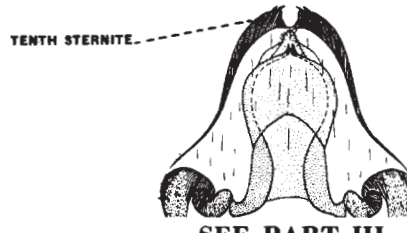
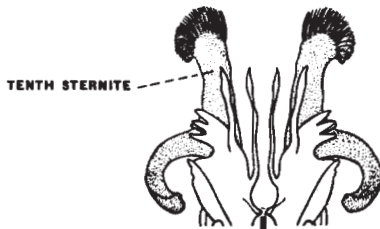
Psorophora

Aedes

PART II SECTION II

tenth sternite crowned with teeth or tuft of spines

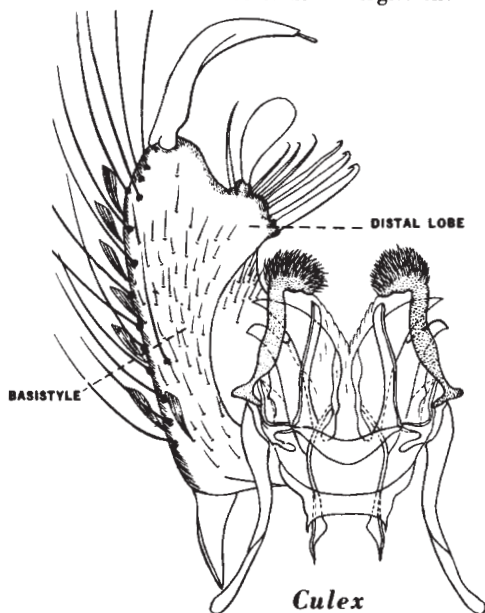
tenth sternite simple or with few teeth



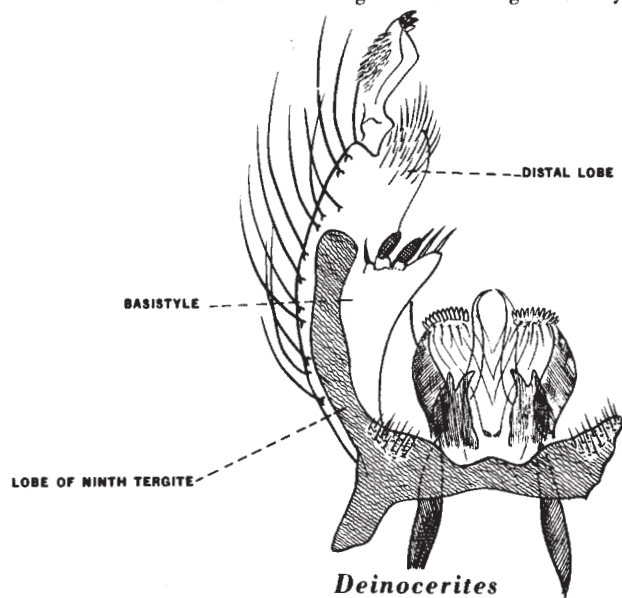
SEE PART III

distal lobe of basistyle with leaf-like scales or rods
lobe of ninth tergite short

distal lobe of basistyle without leaf-like scales or rods
lobe of ninth tergite half as long as basistyle



Culex

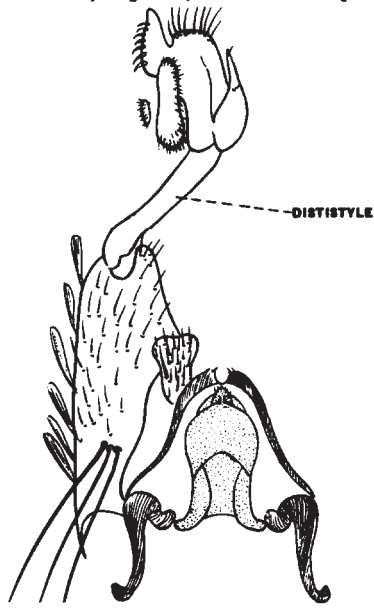


Deinocerites

PART III

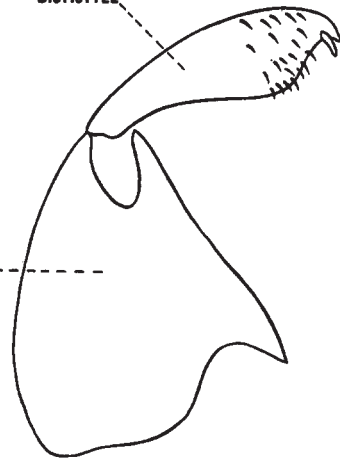
dististyle greatly modified at apex

dististyle not greatly modified at apex



Wyeomyia

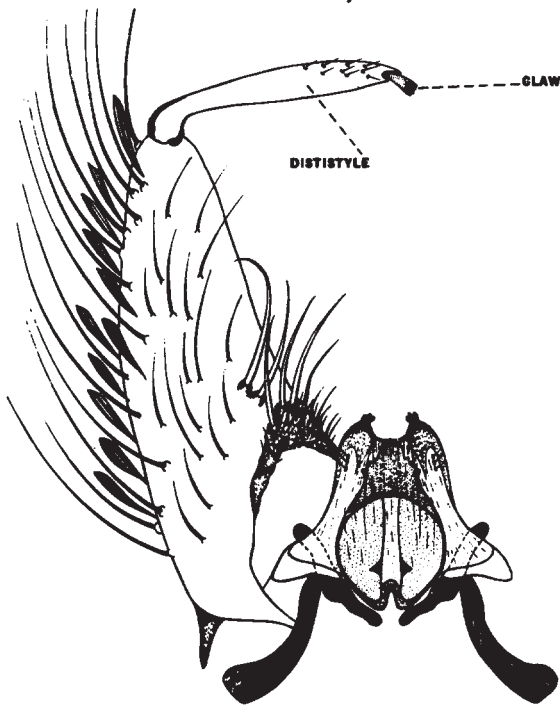
DISTISTYLE



BASISTYLE

claw of dististyle comb-like

claw of dististyle not comb-like



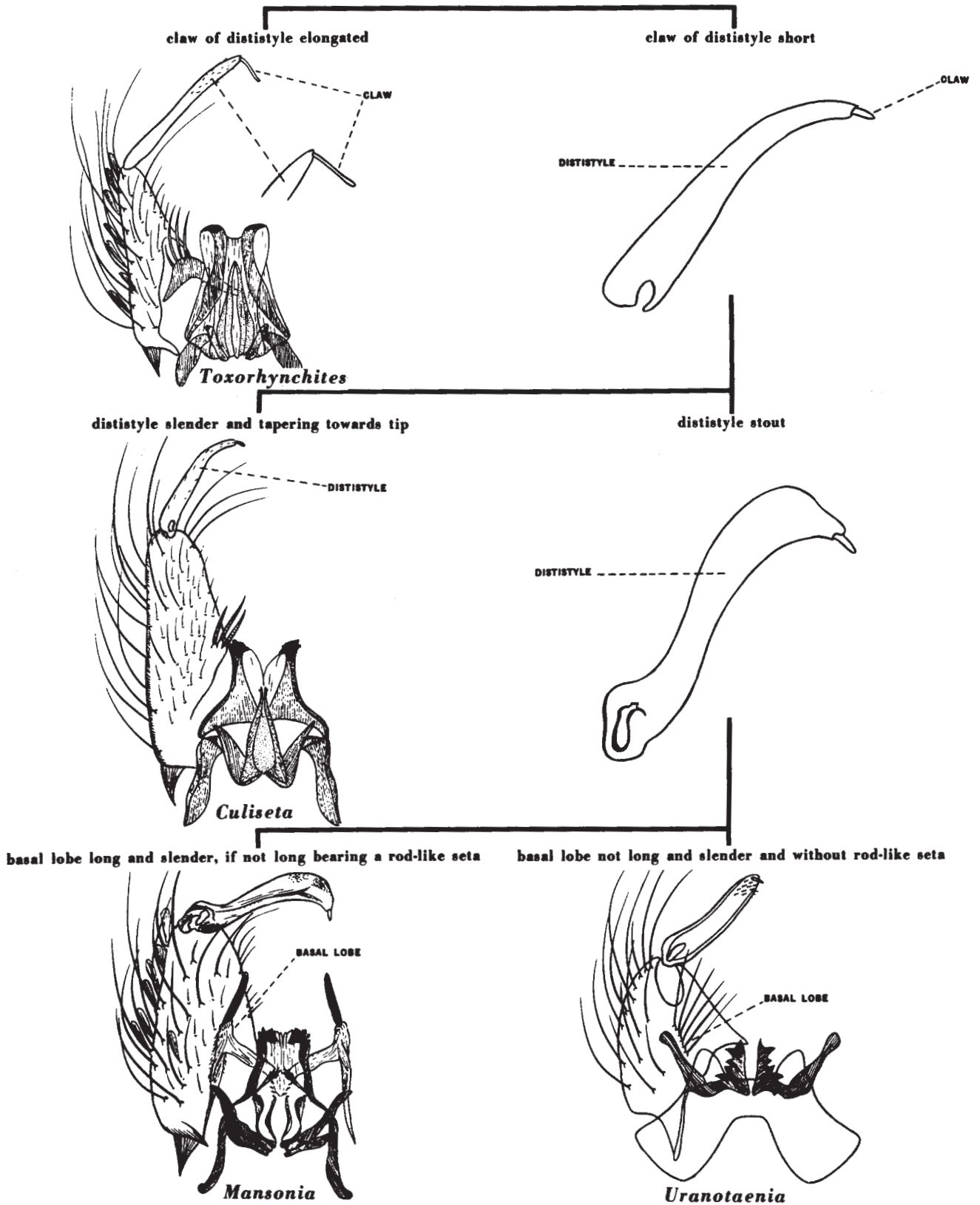
Orthopodomyia

DISTISTYLE

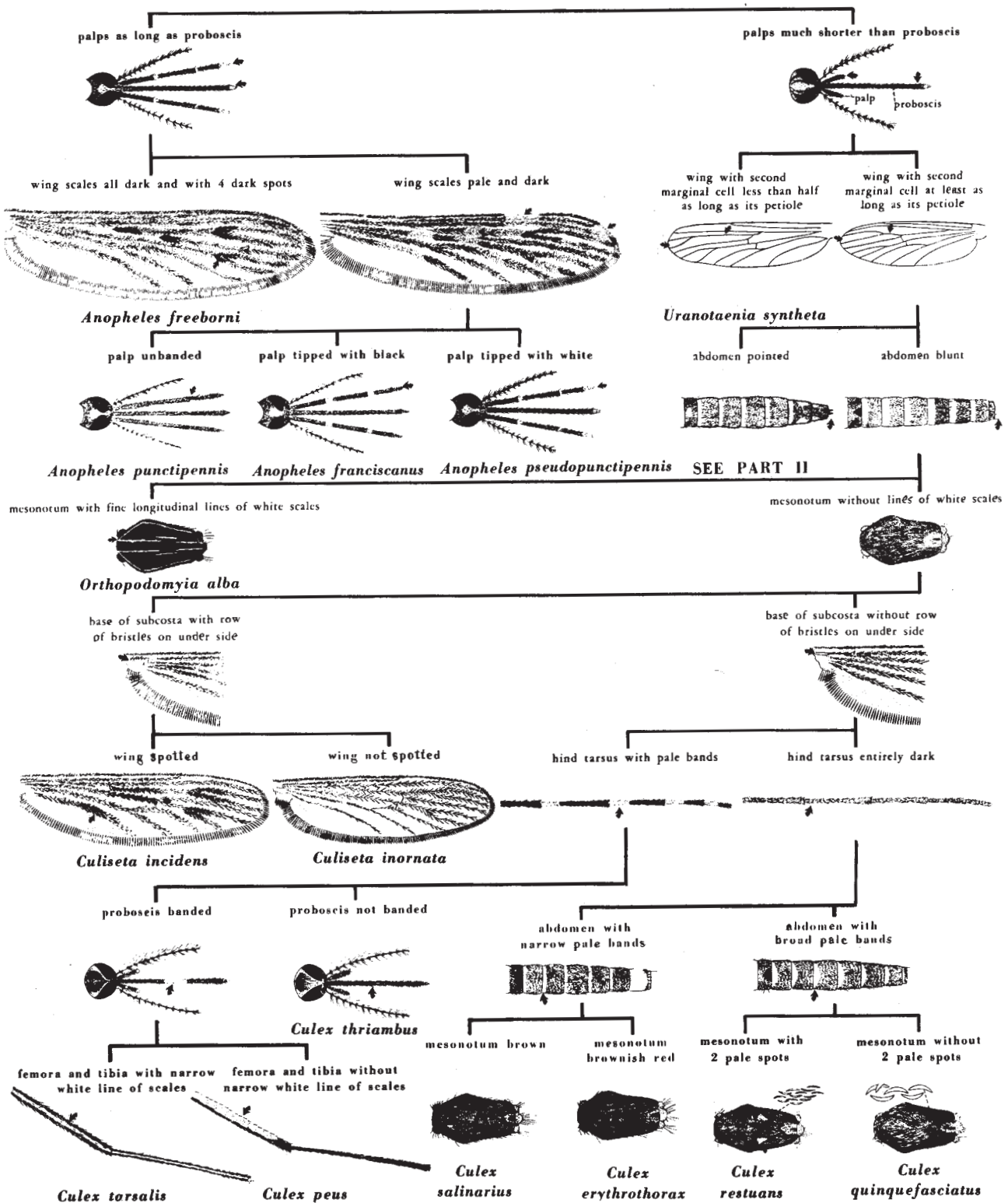
CLAW

SEE PART IV

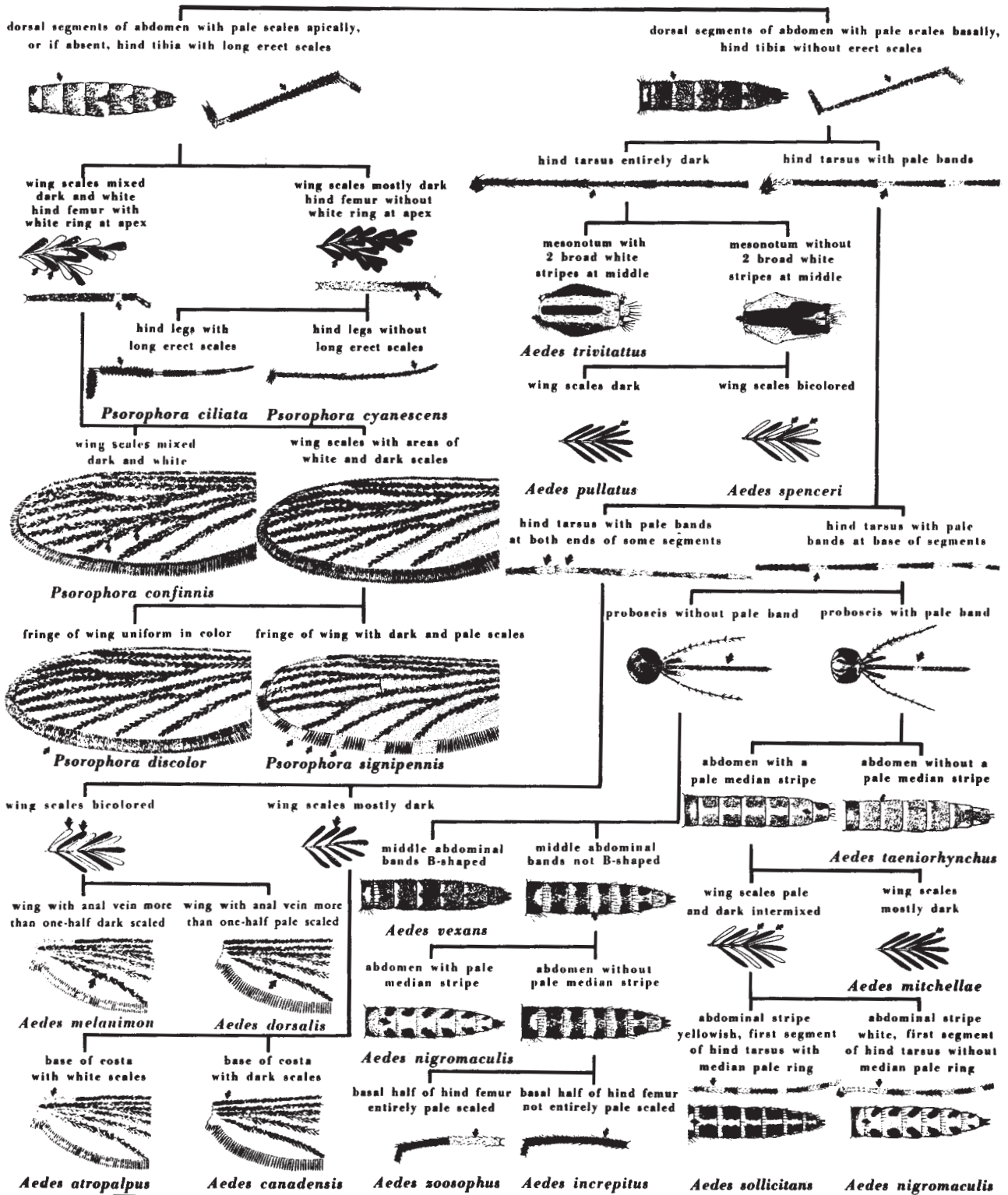
PART IV



MOSQUITOES: PICTORIAL KEY TO MOST ADULTS (FEMALE) OF NEW MEXICO
 PART I
 Chester J. Stojanovich

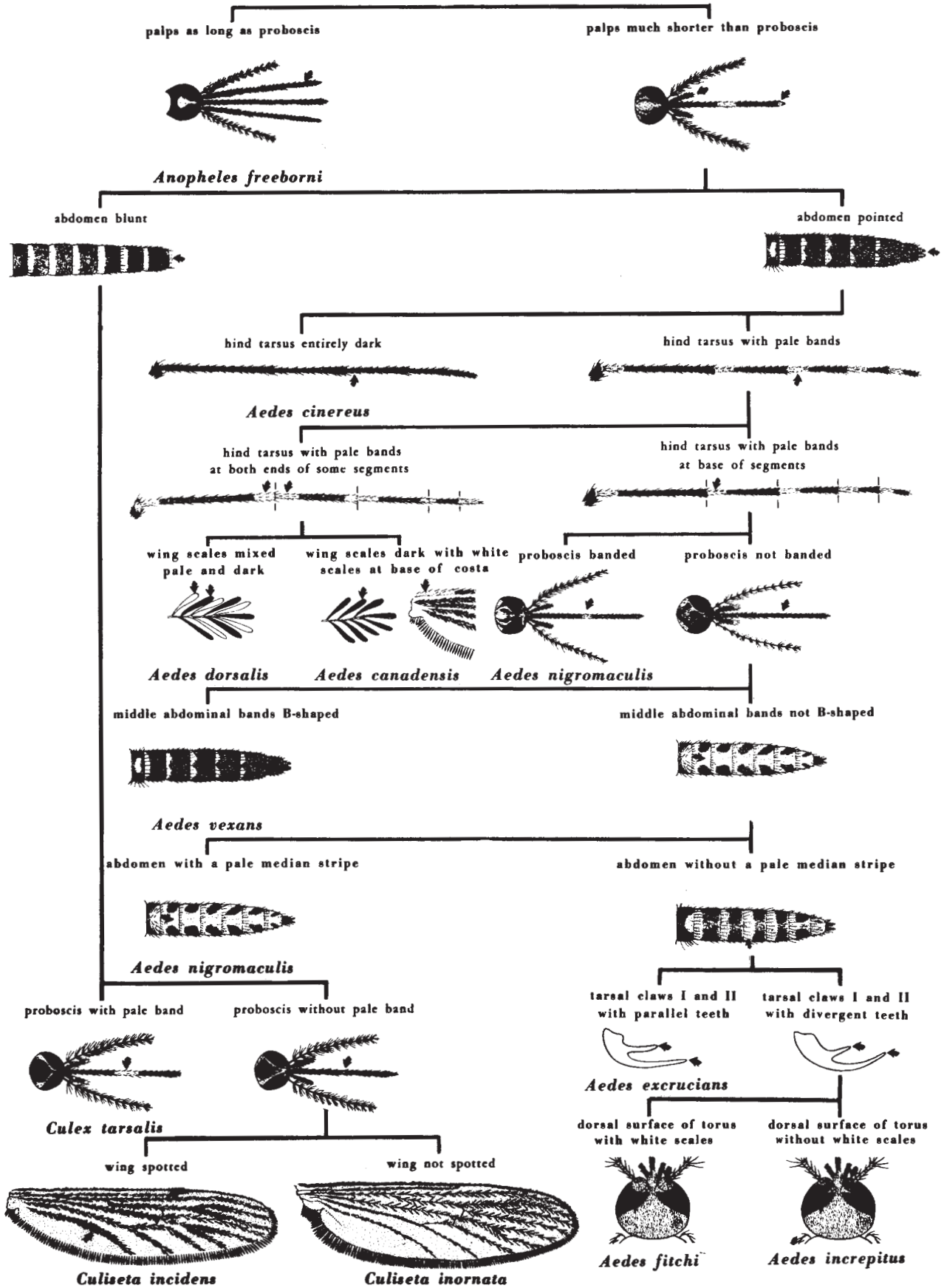


PART II



MOSQUITOES: PICTORIAL KEY TO SOME COMMON ADULTS (FEMALE) OF IDAHO

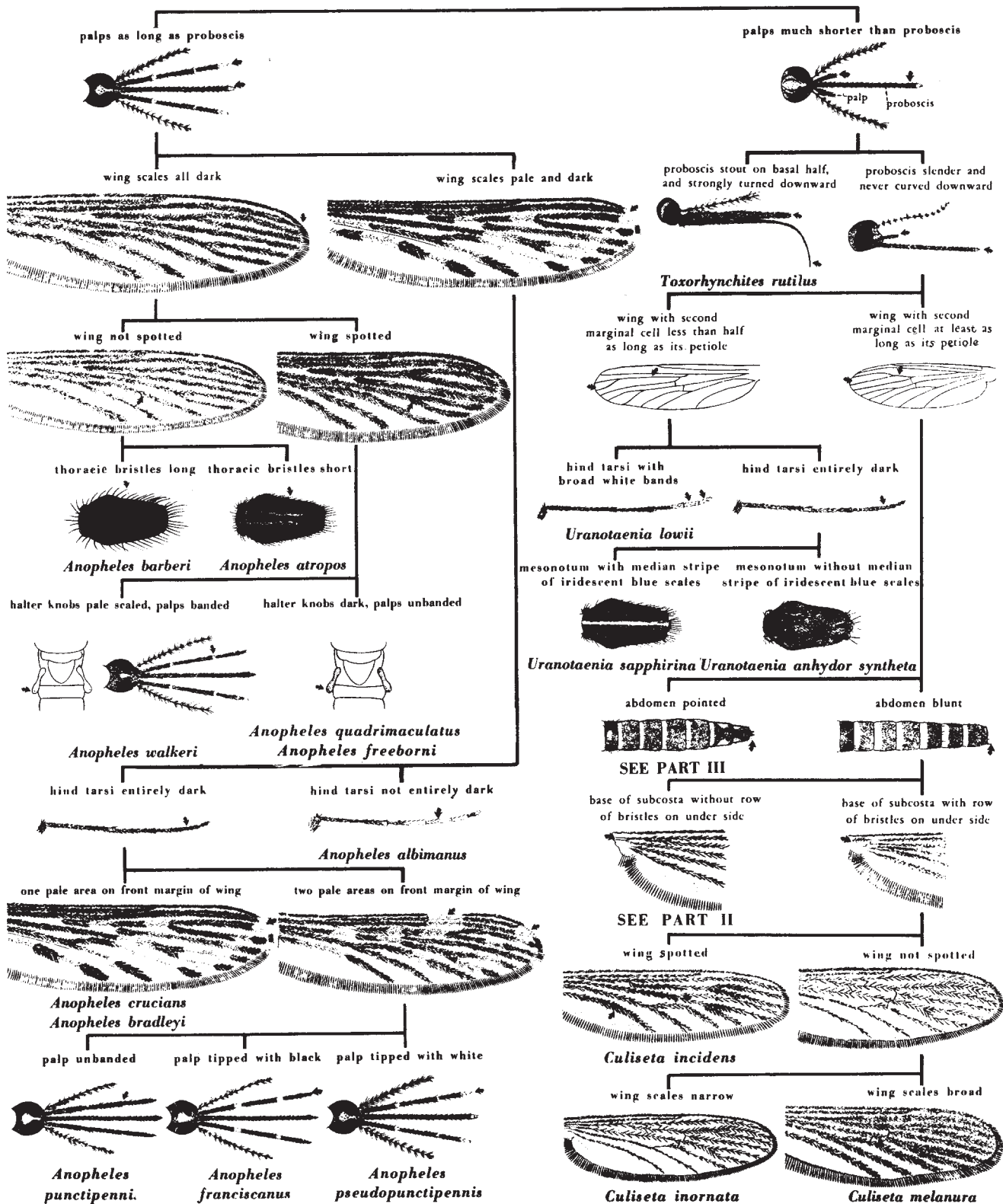
Chester J. Stojanovich



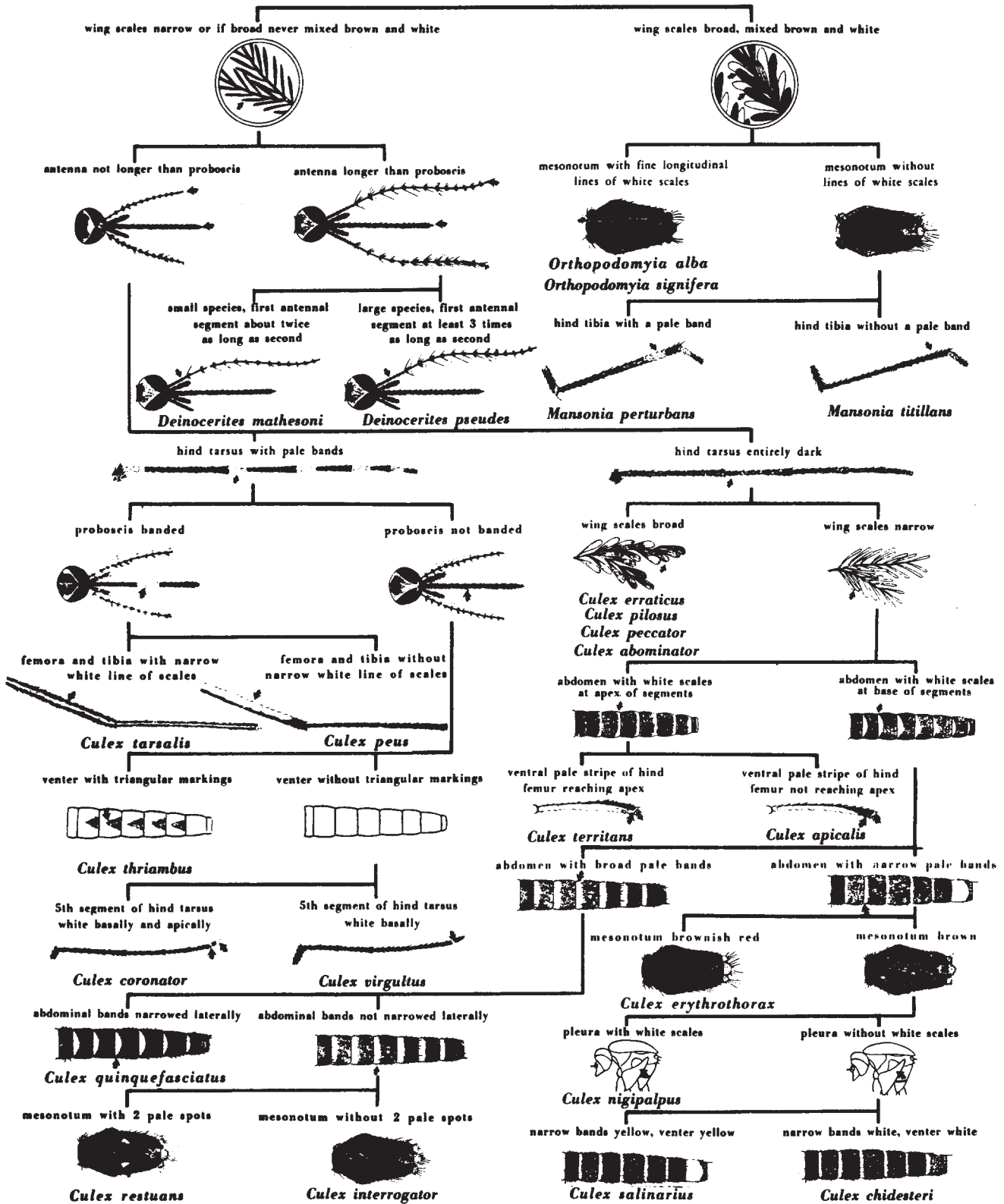
MOSQUITOES: PICTORIAL KEY TO ALL ADULTS (FEMALE) OF TEXAS

PART I

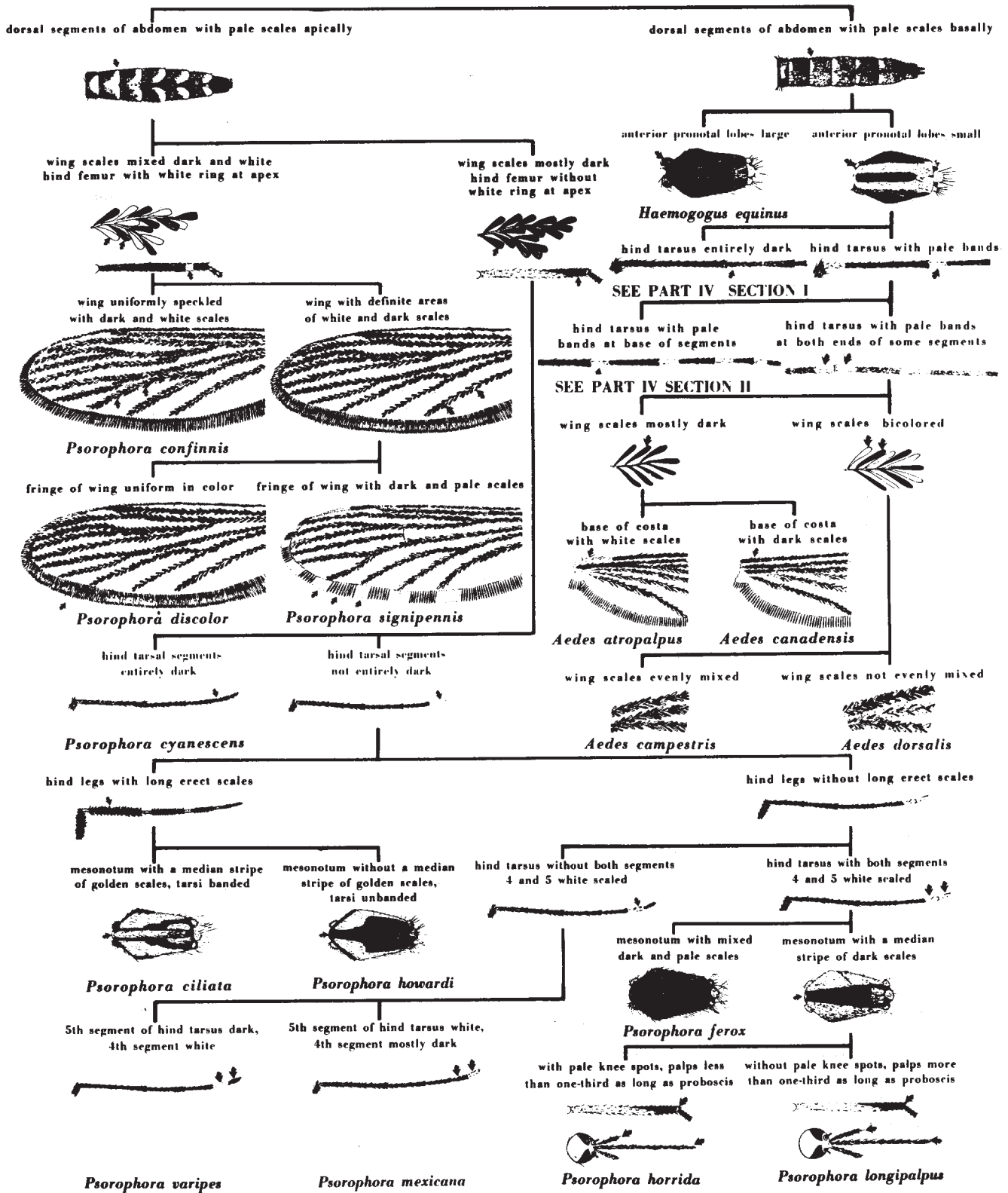
Chester J. Stojanovich



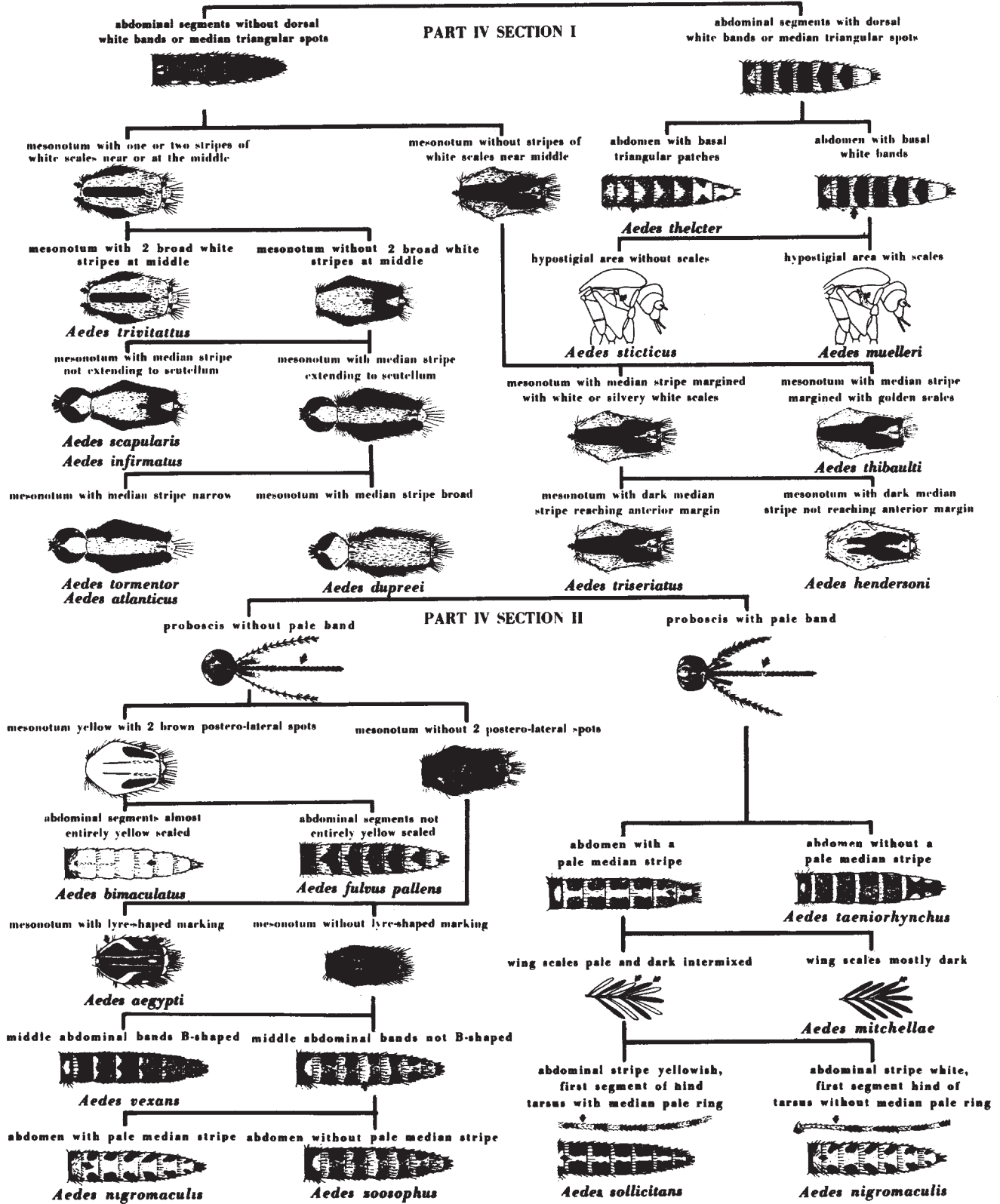
PART II



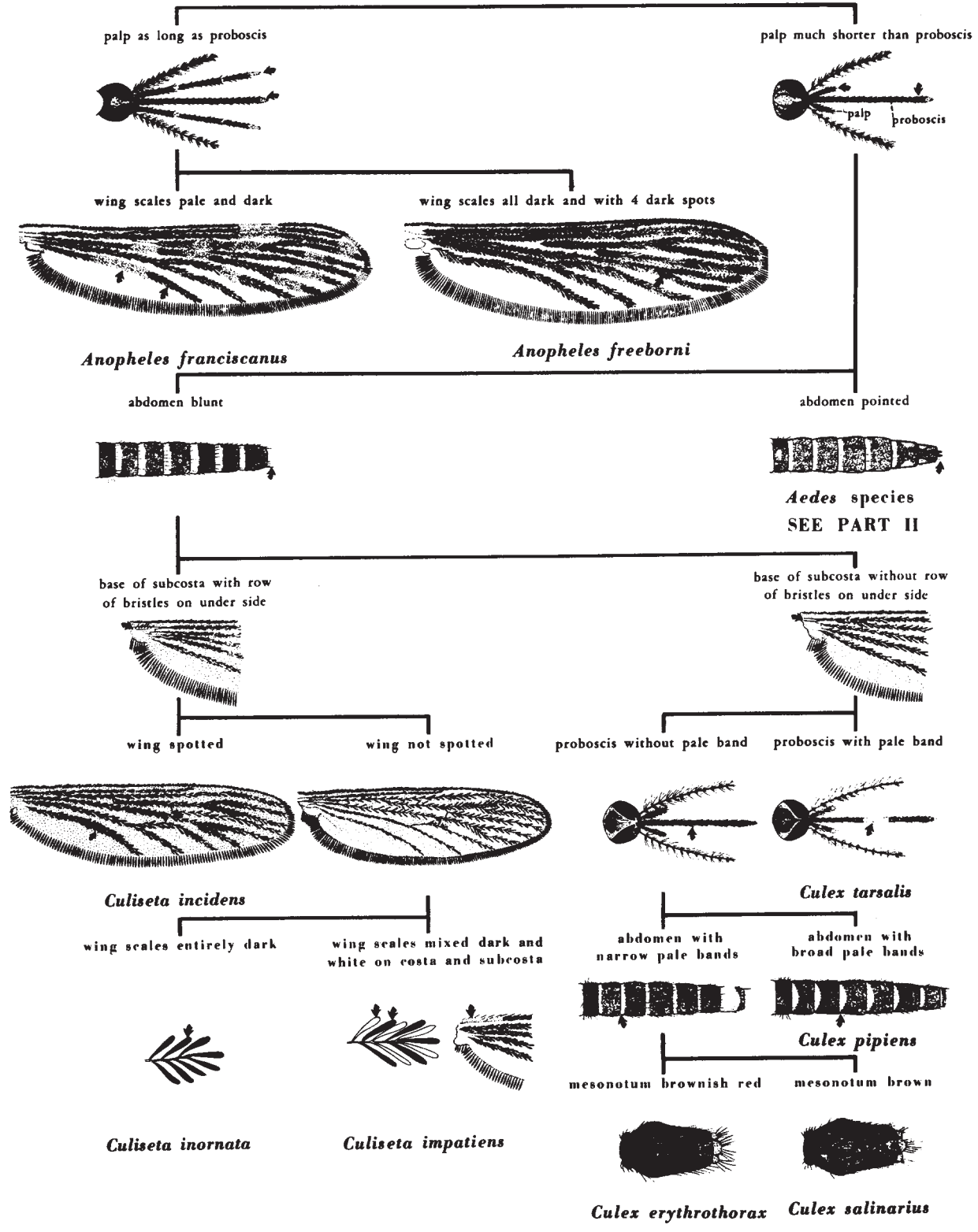
PART III



PART IV



MOSQUITOES: PICTORIAL KEY TO SOME COMMON ADULTS (FEMALE) OF UTAH
 PART I
 Chester J. Stojanovich



PART II

