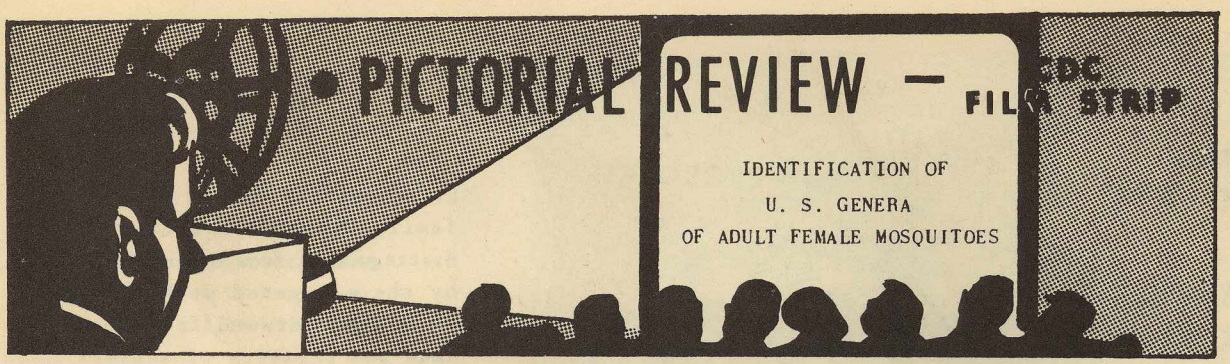
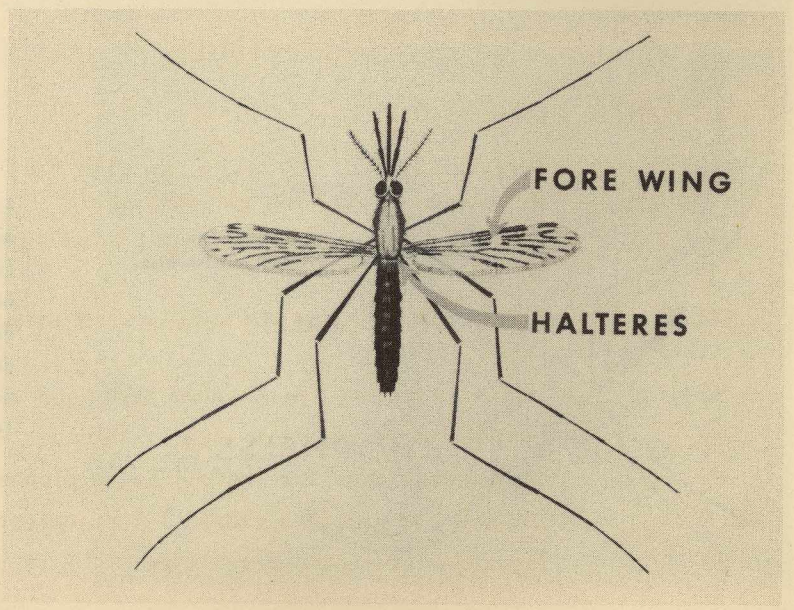


PRODUCTION NO. CDC 5-015 92 FRAMES

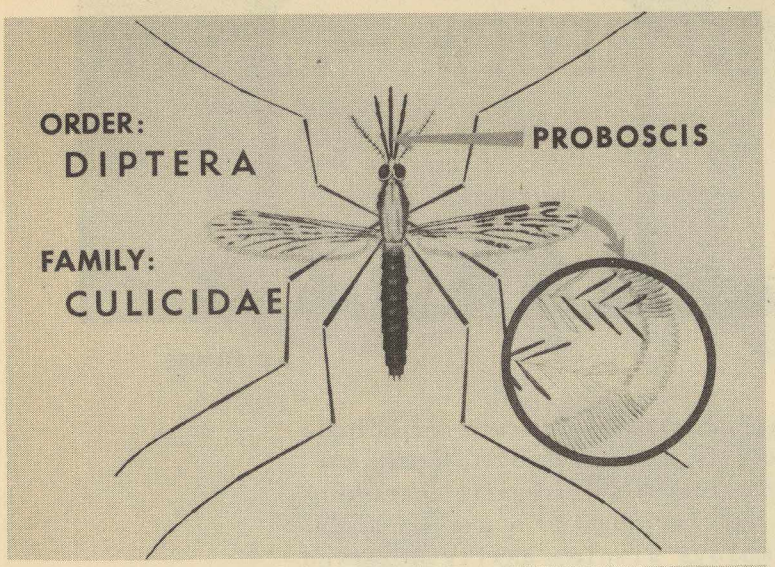
This color film strip is designed to teach morphologic characters used to identify genera of adult female mosquitoes of the United States. Also, specific characteristics of each genus are introduced. A new schematic key is used which employs simple, easily observed structures. Other characters in common use are indicated without elaboration. Introductory taxonomic information and methods of distinguishing mosquitoes from other insects are presented.

The unit is designed for use at the college level in instruction of entomology students, entomologic technicians, and advanced entomologic inspectors.

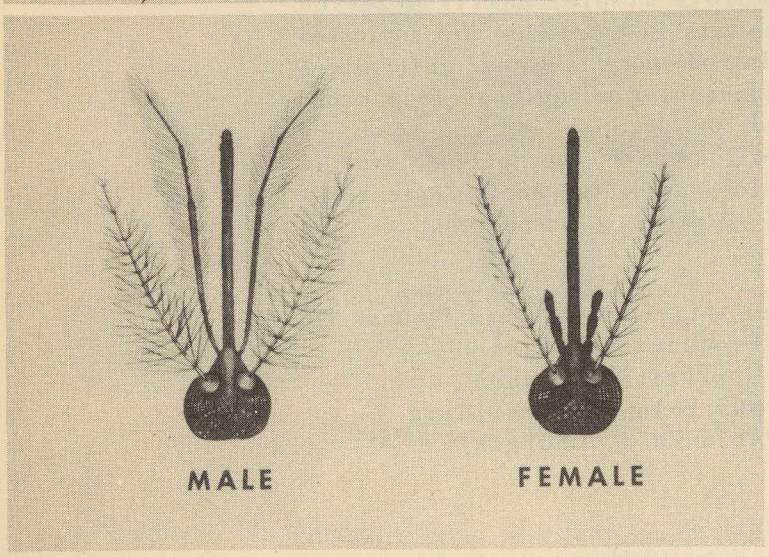
To obtain this film, address request to:
Production Division
Utilization Branch
605 Volunteer Building
Atlanta 3, Georgia



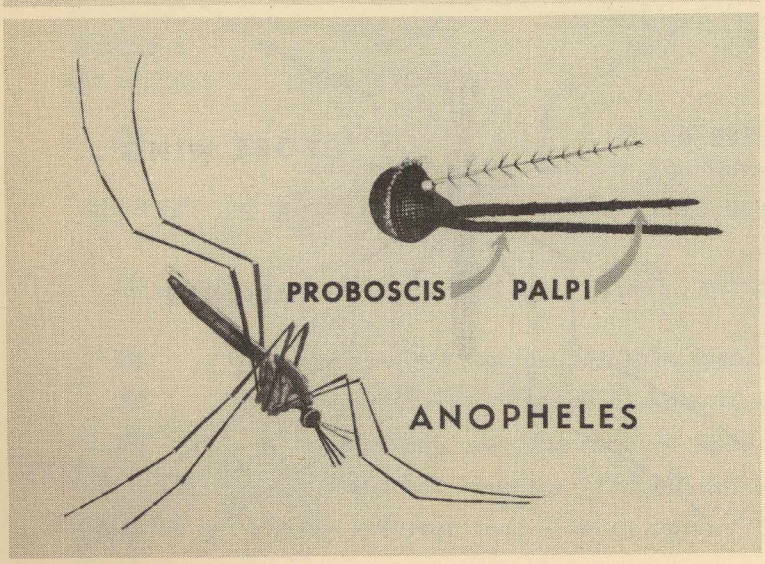
1. Mosquitoes are insects belonging to the order *Diptera* – the true flies. *Diptera* are characterized by the presence of well-developed fore wings. The vestigial hind wings are represented by short, knobbed halteres.



2. Mosquitoes belong to the family *Culicidae*. They are distinguished from other flies by the elongated proboscis extending forward from the head and presence of scales on the veins and border of the wings.

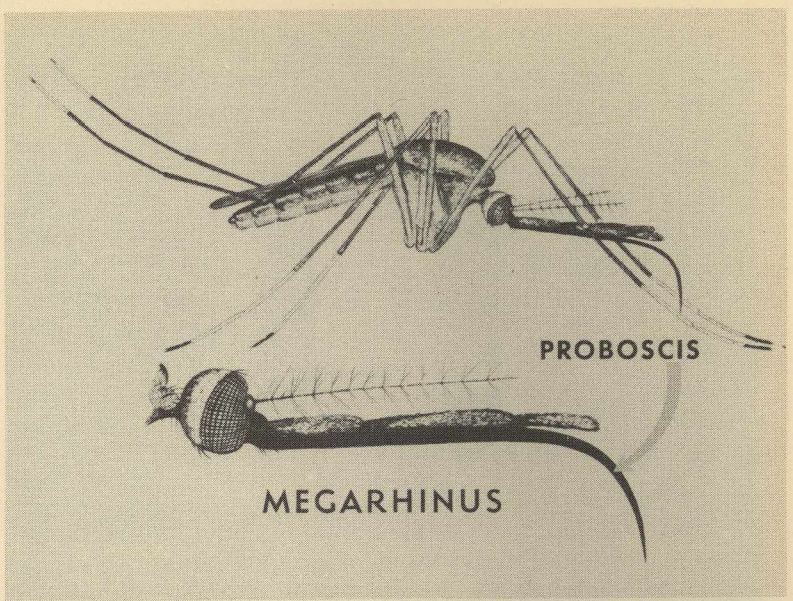


3. The sex of mosquitoes may be distinguished by the antennae. Those of the male are usually quite bushy. Female mosquitoes have slender, almost bare antennae. The identifying characters described hereafter apply to female mosquitoes only.

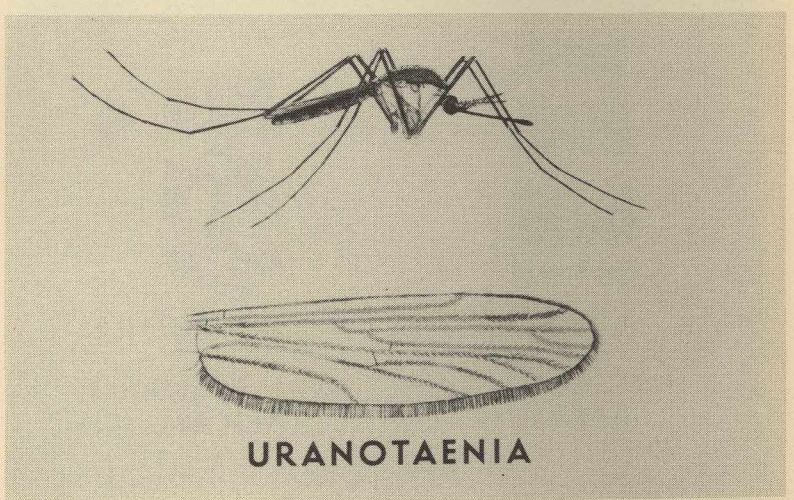


4. Correct identification of mosquito genera depends upon thorough familiarity with basic morphologic characters. Females of the genus *Anopheles*, unlike all other genera of mosquitoes, have palpi as long as the proboscis.

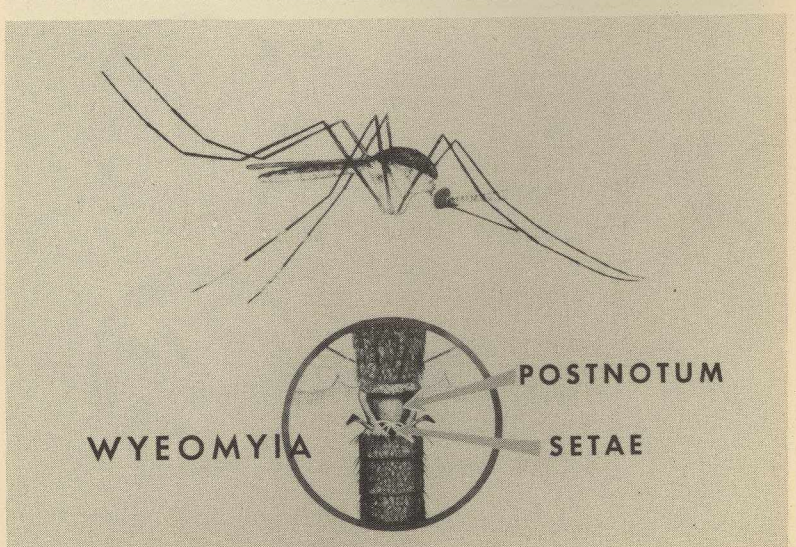
5. *Megarhinus* mosquitoes have a proboscis which curves downward sharply, unlike all other mosquitoes.

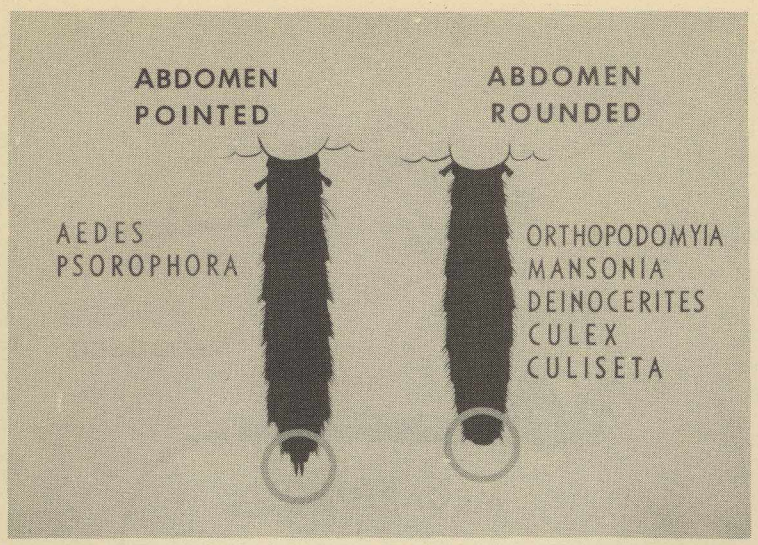


6. *Uranotaenia*, by contrast, are very small mosquitoes with bluish iridescent scales in rows or patches.

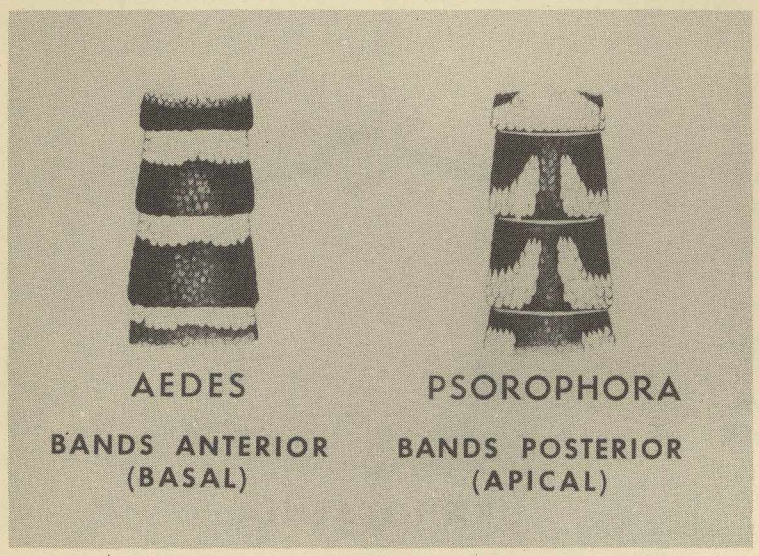


7. *Wyeomyia* may be recognized by the tuft of hairs or setae on the postnotum. Another characteristic of this genus is the longitudinal stripe on the sides of the abdomen.

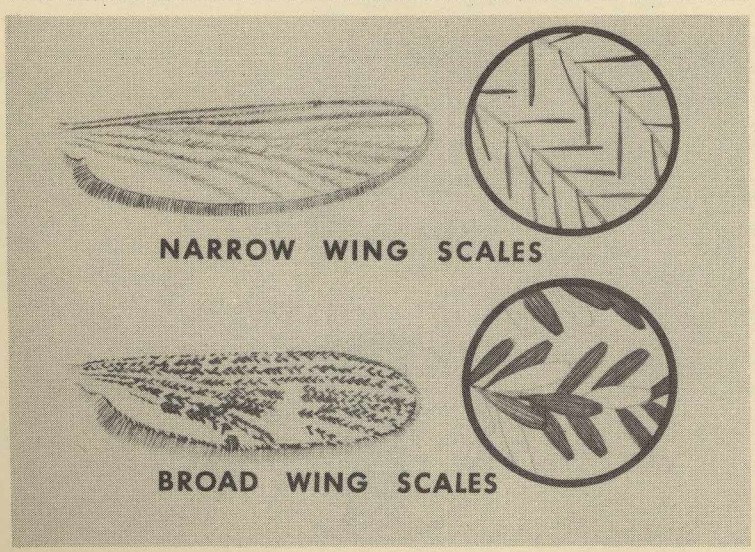




8. The remaining seven mosquito genera may be divided into two groups on the basis of the shape of the tip of the abdomen. The tip of the abdomen is pointed in two genera, *Aedes* and *Psorophora*. The remaining genera have blunt or rounded abdomens: *Orthopodomyia*, *Mansonia*, *Deinocerites*, *Culex* and *Culiseta*.

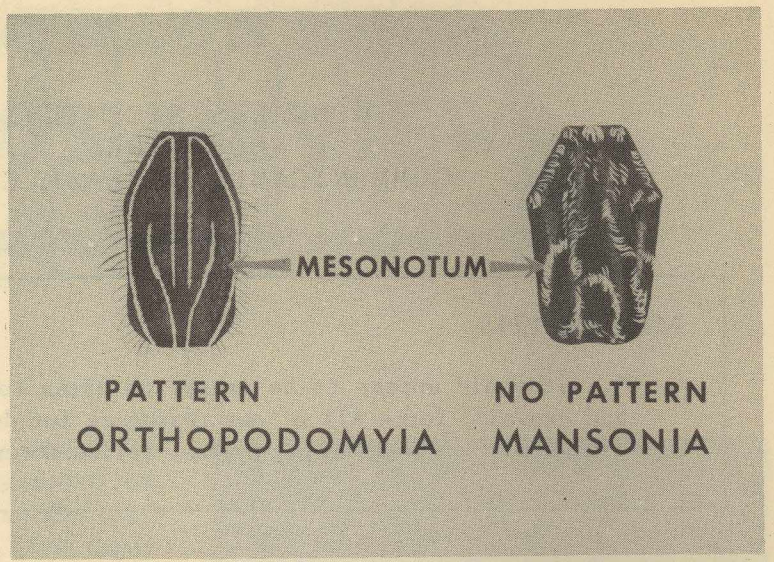


9. In the genus *Aedes*, a white band of scales occurs at the anterior or basal end of the abdominal segments. In contrast, *Psorophora* have the white band of scales located posteriorly or apically.

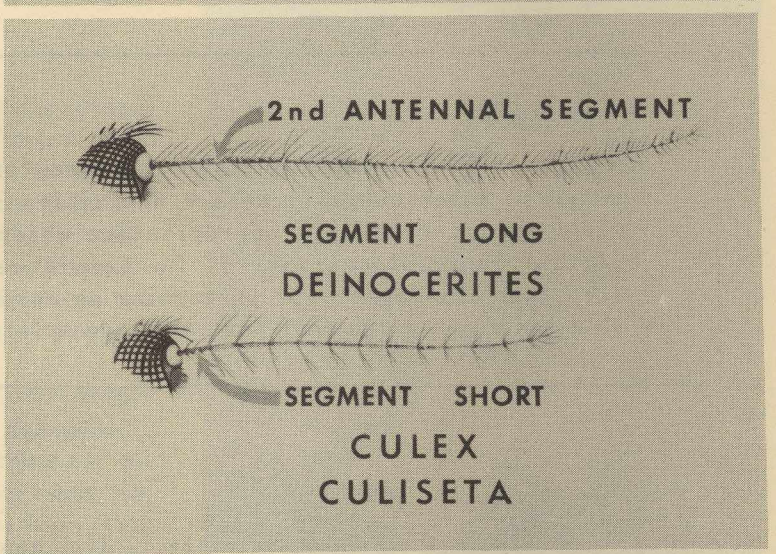


10. The genera with blunt abdomens may be further separated into two groups by using the size of wing scales. *Orthopodomyia* and *Mansonia* have broad, light and dark wing scales. *Deinocerites*, *Culex* and *Culiseta* usually have narrow wing scales.

11. *Orthopodomyia* and *Mansonia* may be distinguished from each other by the pattern on the mesonotum. Scales on the mesonotum of *Orthopodomyia* form a definite pattern of delicate white lines. The dark and light scales on the mesonotum of *Mansonia* do not form a definite pattern.



12. *Deinocerites* is distinguished from *Culex* and *Culiseta* by the long second antennal segment. It is longer than the next two segments combined. In other genera it is short. The antennae of *Deinocerites* are much longer than those of other genera.



13, The last two genera, *Culiseta* and *Culex* may be differentiated by the presence or absence of spiracular bristles. *Culiseta* has spiracular bristles. *Culex* does not. In most species of *Culiseta* the cross veins arising from wing vein four are close together. In *Culex* they are widely separated.