

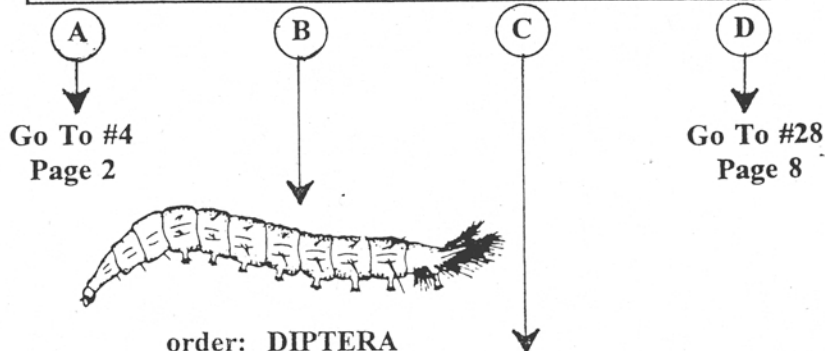
# KWIK-KEY to Immatures and Wingless Adult Insects

copyright 1993 by John R. Meyer

START

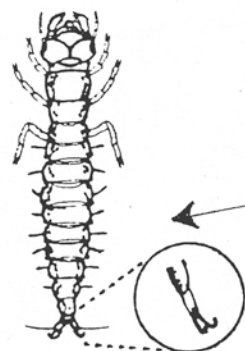
#1. Where are leg-like appendages located?

- A. Only on the thorax
- B. Only on the abdomen
- C. On BOTH thorax and abdomen
- D. No visible legs (but fleshy bumps may be present)

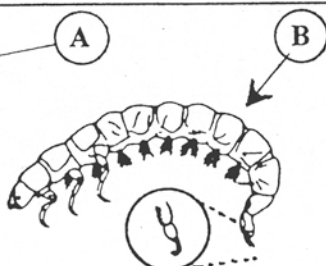


#2. What structures are found on the last set of abdominal prolegs?

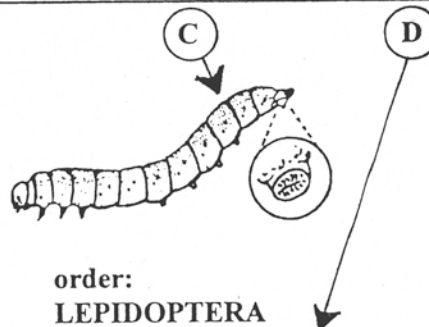
- A. A pair of large hooks on each leg
- B. A single large hook on each leg
- C. A ring (or rows) of hooks or barbs (crochets)
- D. No hooks or barbs



order:  
NEUROPTERA



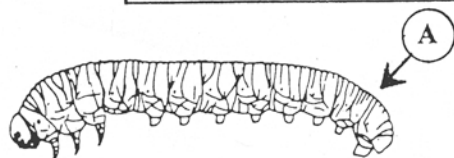
order:  
TRICHOPTERA



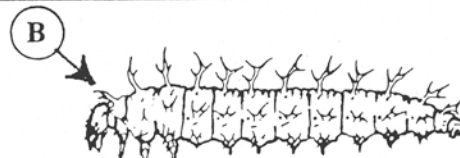
order:  
LEPIDOPTERA

#3. The abdominal prolegs are best described as:

- A. Rounded and fleshy
- B. Slender and pointed



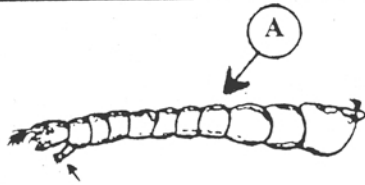
order: HYMENOPTERA (sawflies)



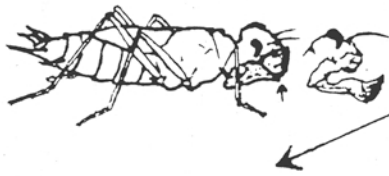
order: MECOPTERA

#4. How many thoracic legs are present?

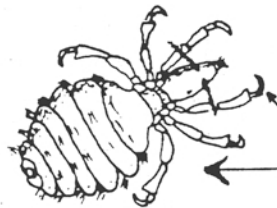
- A. One (pseudopod)
- B. 4-6 (with claws)



order: DIPTERA



order: ODONATA



order: ANOPLURA



order: THYSANOPTERA

#5. What type of mouthparts are present?

- A. Hinged labial "mask" covers mouthparts and ventral side of head
- B. Mouthparts mandibulate -- designed for grasping, biting, and/or chewing
- C. Mouthparts styletate -- designed for piercing, rasping, and/or sucking
- D. Mouthparts not visible, concealed within head

Go To #13  
Page 4

Go To #9  
Page 3

#6. The tarsus is best described as:

- A. One-segmented with a single prominent claw
- B. 2-5 segmented with small, paired claws

#7. Mouthparts are best described as:

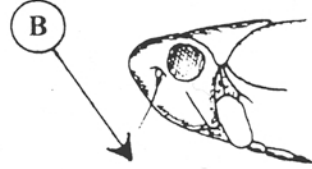
- A. Rasping-sucking, with stylets housed in a cone-shaped structure on ventral side of head. Body spindle-shaped. Less than 5 mm in length.
- B. Piercing-sucking, with stylets enclosed in a hinged, jointed proboscis

#8. Where does the proboscis attach to the head?

- A. Front of head, often curving down and back
- B. Back of head, near front legs

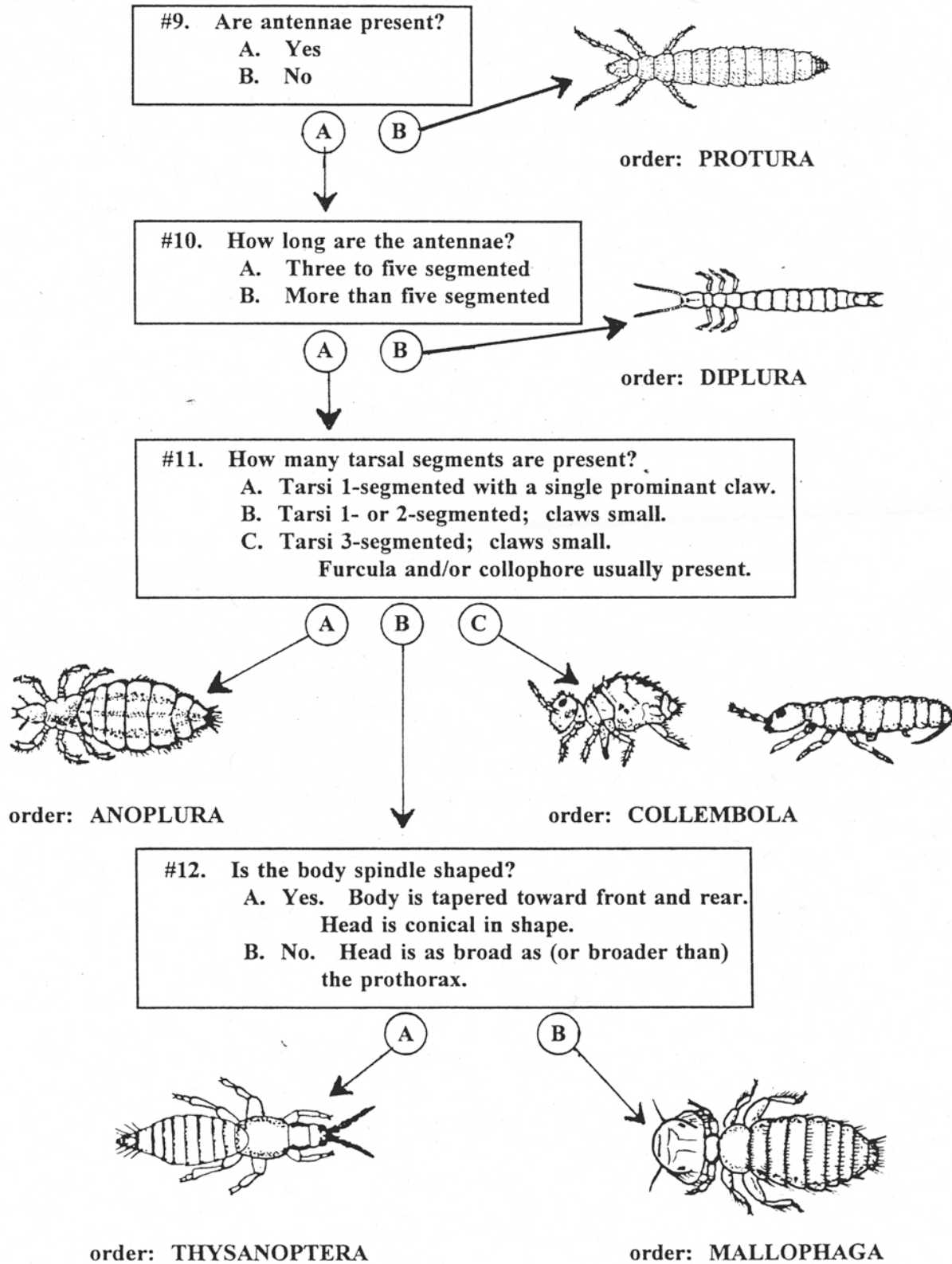


order: HEMIPTERA (Heteroptera)



order: HEMIPTERA (Homoptera)

**Insects with Mouthparts Concealed in the Head:**





order: ORTHOPTERA

#13. Are the hind legs adapted for jumping?

- A. Yes
- B. No

A

B

#14. What type of eyes are present?

- A. Only compound eyes present.
- B. Both compound eyes and ocelli.
- C. Only ocelli present.
- D. Completely lacking eyes.

A

B

C

D

Go To #23  
Page 7

Go To #22  
Page 6

#15. Are gills present or absent?

- A. No gills present.
- B. Paired tracheal gills (shaped like feathers or leaves) present on each of the first seven abdominal segments.
- C. Thread-like tracheal gills present in tufts near the base of each leg.
- D. Gills present as long strands or filaments attached to the abdomen.

A

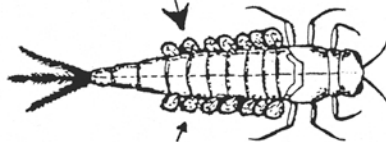
B

C

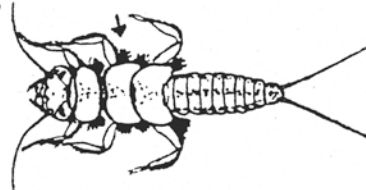
D

Go To #16  
Page 5

Go To #23  
Page 7



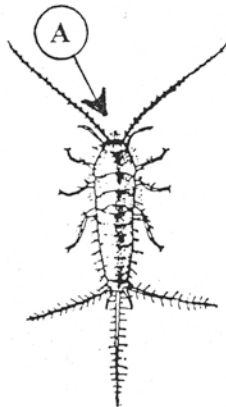
order: EPHEMEROPTERA



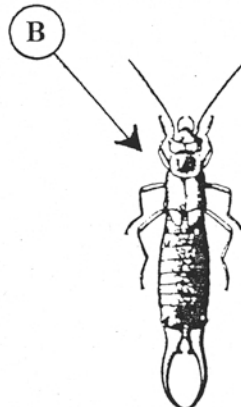
order: PLECOPTERA

#16. What structures are present at the tip of the abdomen?

- A. Two or three long filaments
- B. Stout, forceps-like cerci
- C. Short, segmented cerci
- D. Spines or barren



order: THYSANURA



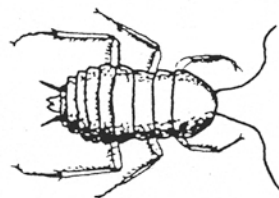
order: DERMAPTERA

D

Go To #19  
Page 6

#17. The antennae are best described as:

- A. Filiform - long and slender
- B. Moniliform - beaded



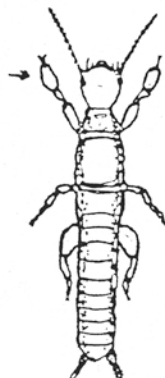
order: DICTYOPTERA

A

B

#18. Are the front tarsi swollen or enlarged?

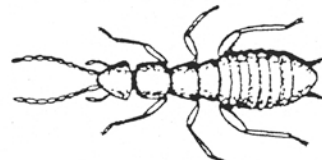
- A. Yes
- B. No



order: EMBIOPTERA

A

B



order: ZORAPTERA

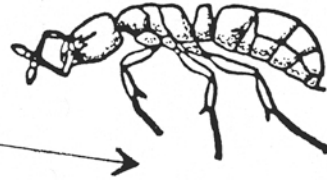
#19. Are the antennae elbowed?

- A. No
- B. Yes

A



B



order: HYMENOPTERA (ants)

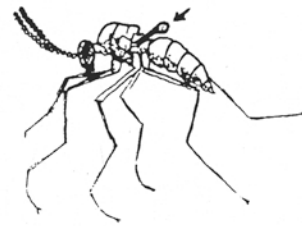
#20. Are halteres (knobs or clubs) present on the thorax?

- A. No
- B. Yes

A



B

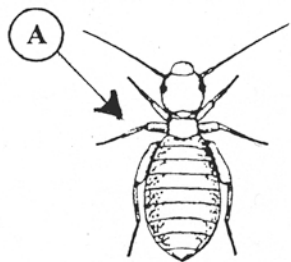


order: DIPTERA

#21. Is the prothorax smaller than other body segments?

- A. Yes. Mouthparts face downwards.
- B. No. Mouthparts face forward.

A



order: PSOCOPTERA

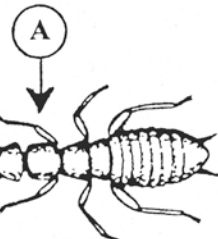
B



#22. What color is the body?

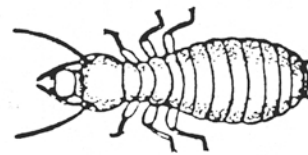
- A. Dark in color -- usually brown
- B. Light in color -- ivory or cream

A



order: ZORAPTERA

B



order: ISOPTERA

#23. How many claws are on each tarsus?

- A. One
- B. Two

A

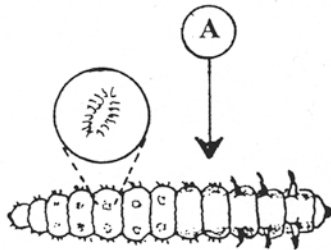
B

#24. Are crochets (hooks or barbs) present instead of prolegs on the abdomen?

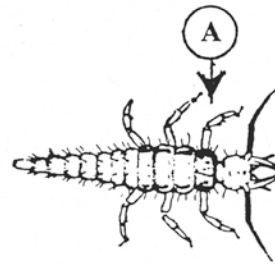
- A. Yes
- B. No

#25. Are the mandibles long and sickle-shaped?

- A. Yes
- B. No



order: LEPIDOPTERA



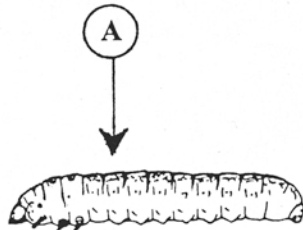
order: NEUROPTERA

#26. Is the body shape eruciform (caterpillar-like)?

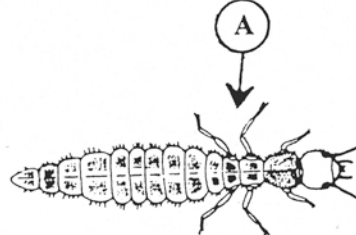
- A. Yes
- B. No

#27. Antennae are best described as:

- A. 2-4 Segmented
- B. Bristle-like, unsegmented
- C. Obscure or absent



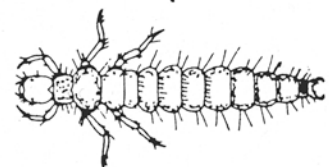
order: HYMENOPTERA



order: NEUROPTERA

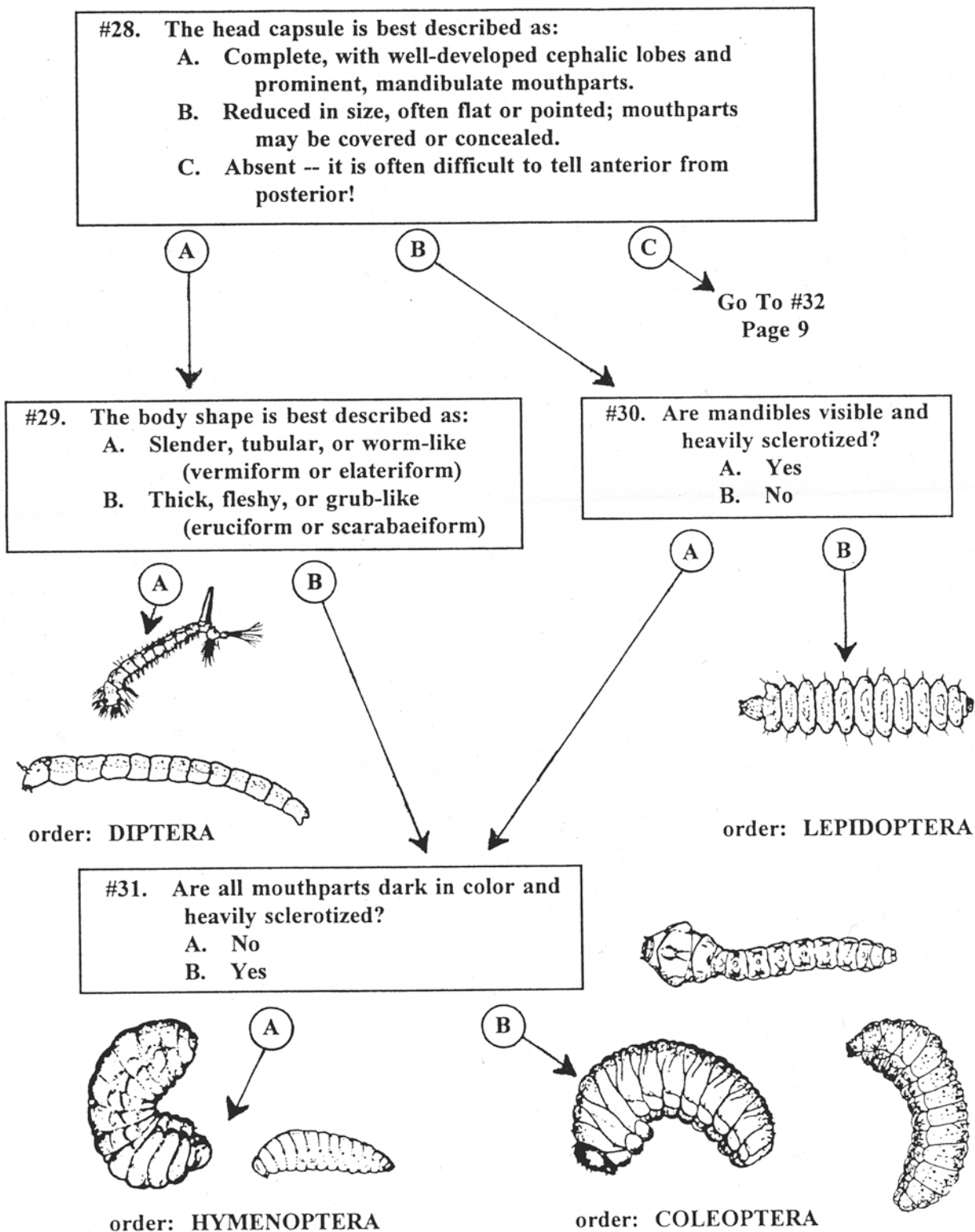


order: COLEOPTERA



order: TRICHOPTERA

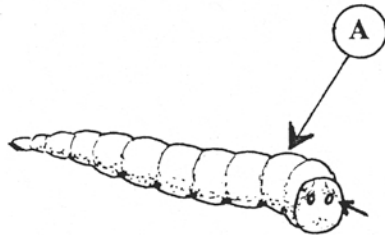
Legless Insects:





Legless Insects with no Distinct Head Capsule:

- #32. Are the last pair of spiracles larger and more distinct than the others? (They may look like eye-spots on the broader end of the body)
- A. Yes, one pair of large spiracles
  - B. No, spiracles similar or absent



order: DIPTERA



- #33. Is the body clothed with hairs, spines, or bristles?
- A. Yes
  - B. No



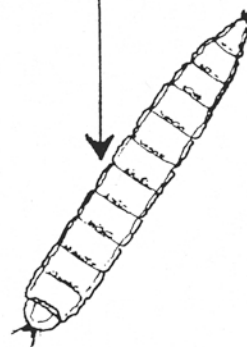
- #34. General body type is best described as:
- A. Firm, slender, and rigid
  - B. Soft, plump, and fleshy



order: SIPHONAPTERA



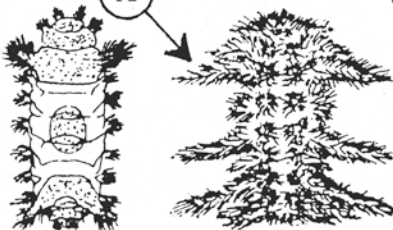
- #35. Are small, black mouthhooks present at the narrow end of the body?
- A. Yes
  - B. No



order: HYMENOPTERA



- #36. Are chewing mouthparts present on the ventral side of the body?
- A. Yes
  - B. No



order: LEPIDOPTERA



order: DIPTERA