

# MedVet Classification

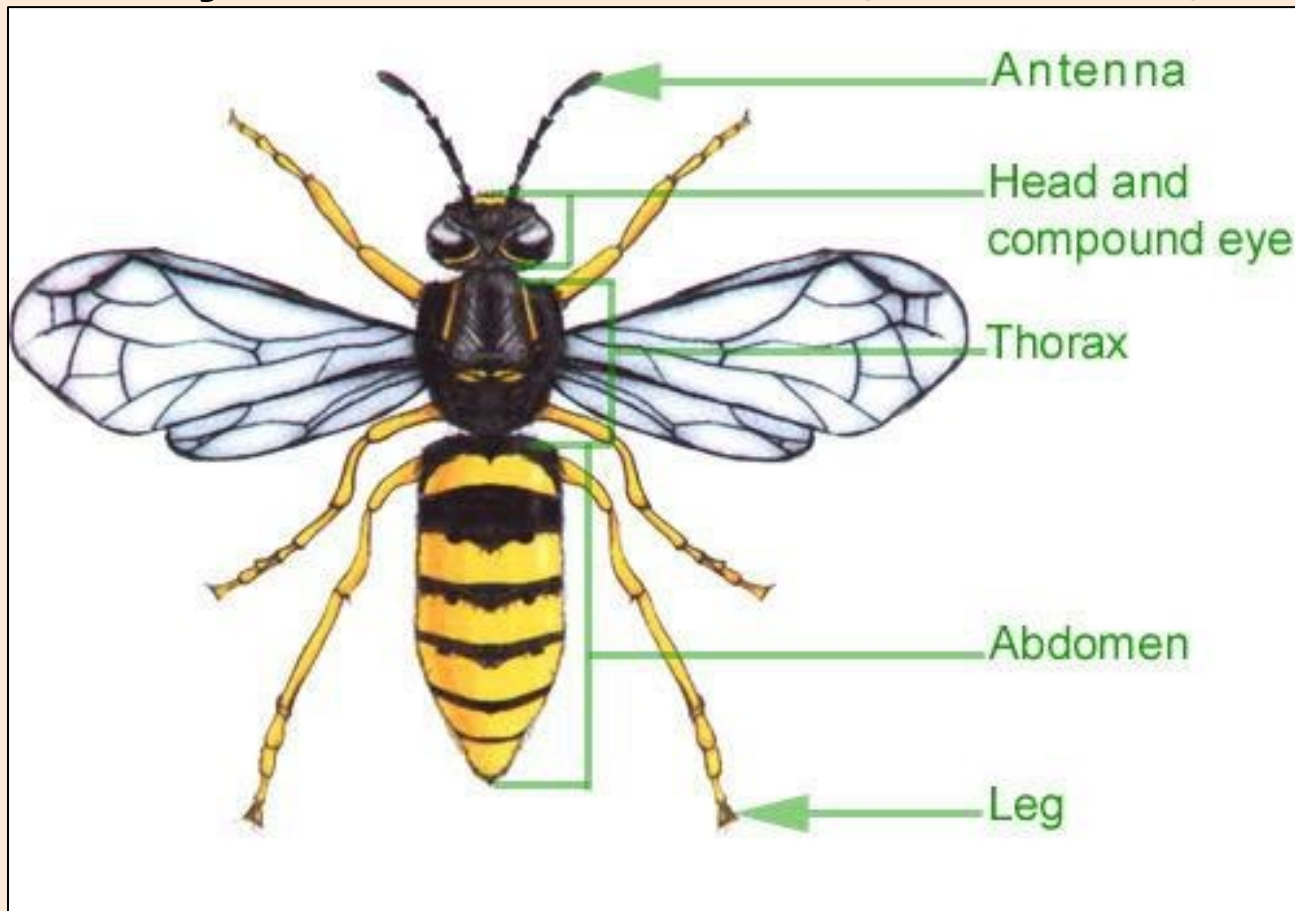
- **Kingdom: Animalia**
  - **Phylum: Arthropoda**
    - **Class: Insecta**
      - **Order: Diptera**
        - **Family: MANY!**
      - **Order: Phthiraptera**
      - **Order: Siphonaptera**
      - **Order: Blattodea**
      - **Order: Hemiptera**
      - **Order: Hymenoptera**
      - **Order: Coleoptera**
      - **Order: Lepidoptera**
    - **Class: Arachnida**
      - **Order: Acari**
      - **Order: Araneae**
      - **Order: Solifugae**
      - **Order: Scorpiones**



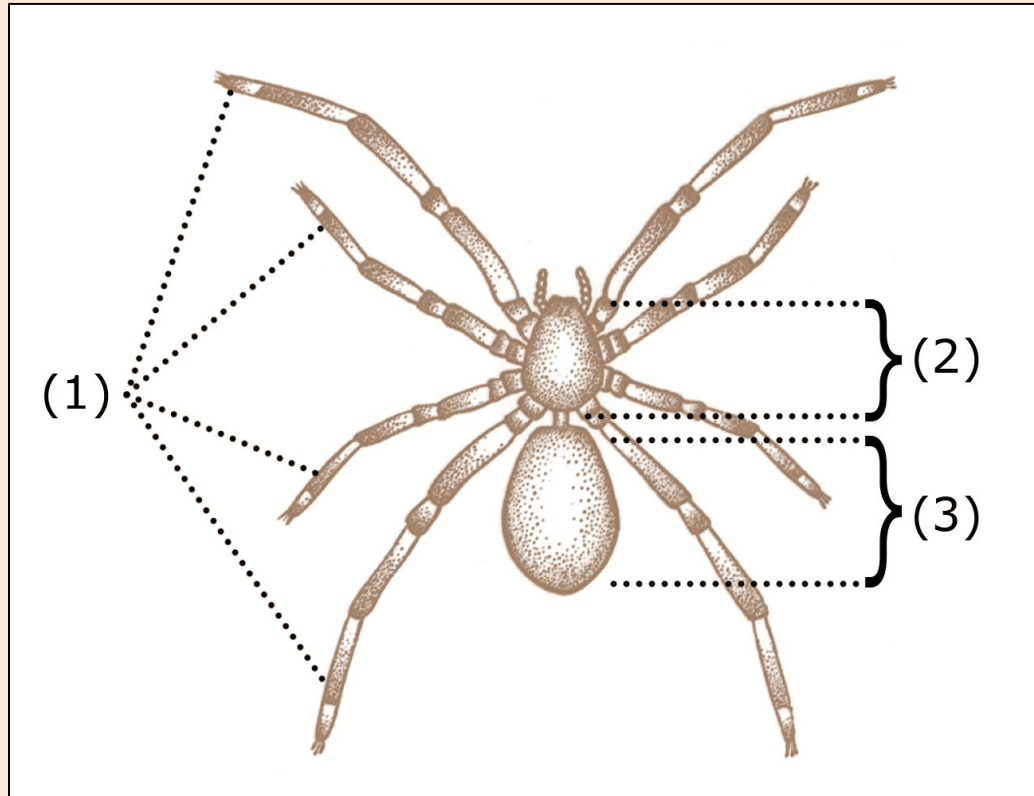


# Characteristics of Class Insecta

- 1 exoskeleton
- 3 body segments
- 2 compound eyes, antennae
- 4 wings, usually
- 6 legs
- 5 segments on jointed legs



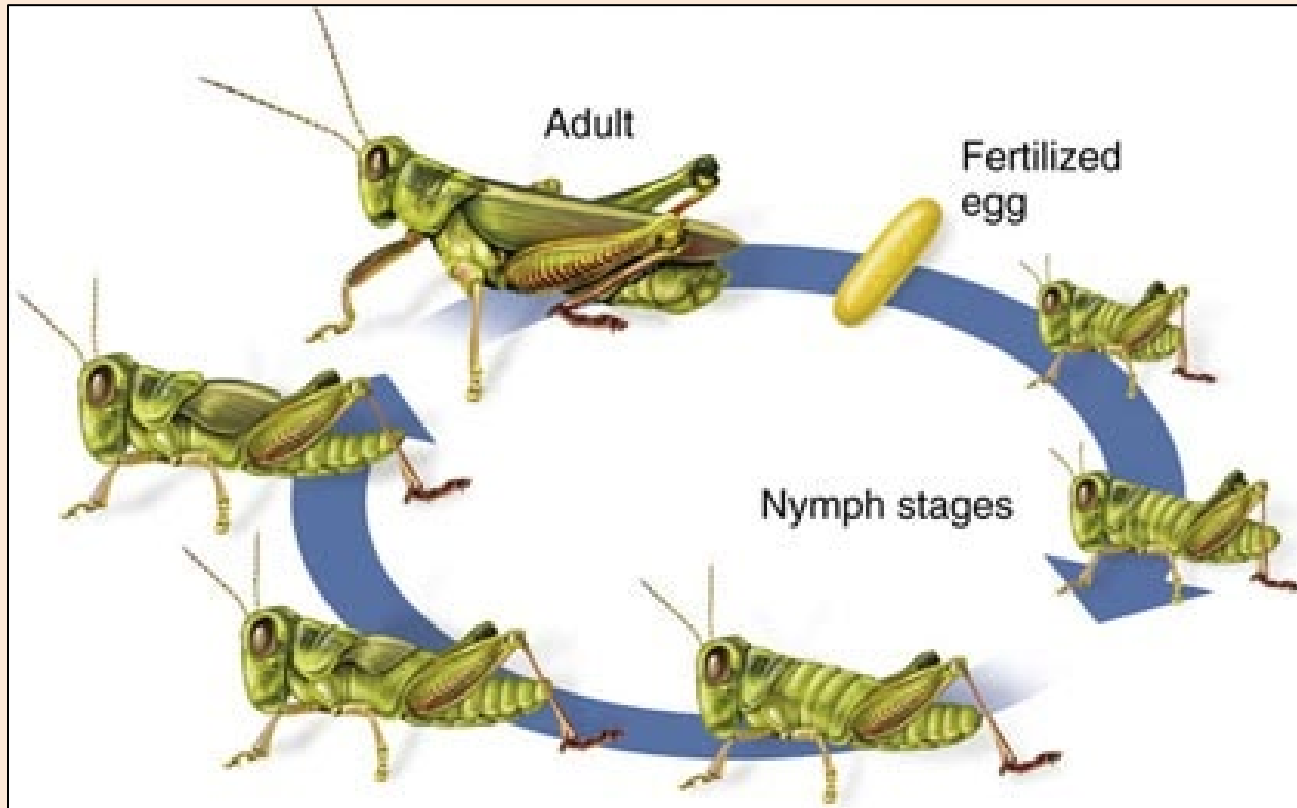
# Characteristics of Class Arachnidae



- **2 body segments**

- **8 legs**

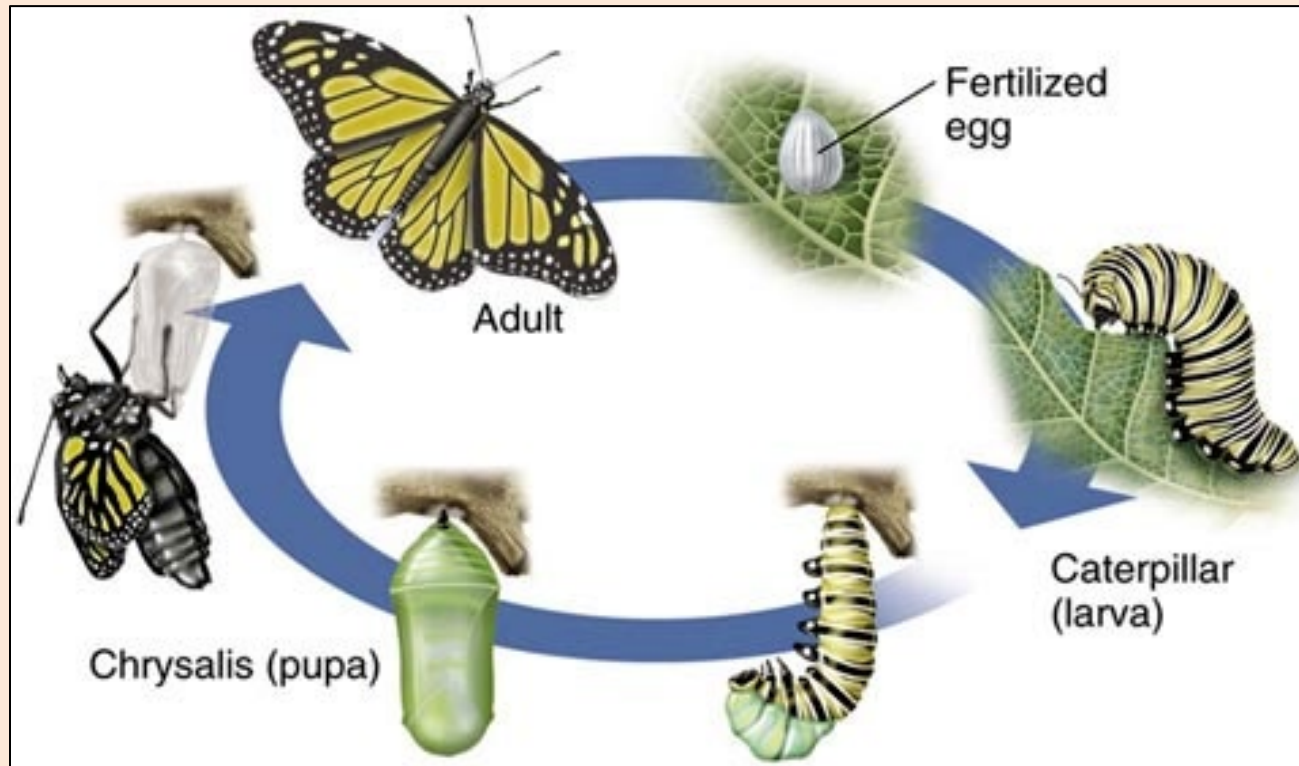
# Metamorphosis: Hemimetabolous



**Incomplete, Simple**  
**Egg-nymph (instar)-adult**

**Keyword: Instar**

# Metamorphosis: Holometabolous



**Complete, complex**  
**Egg-larvae-pupae-adult**

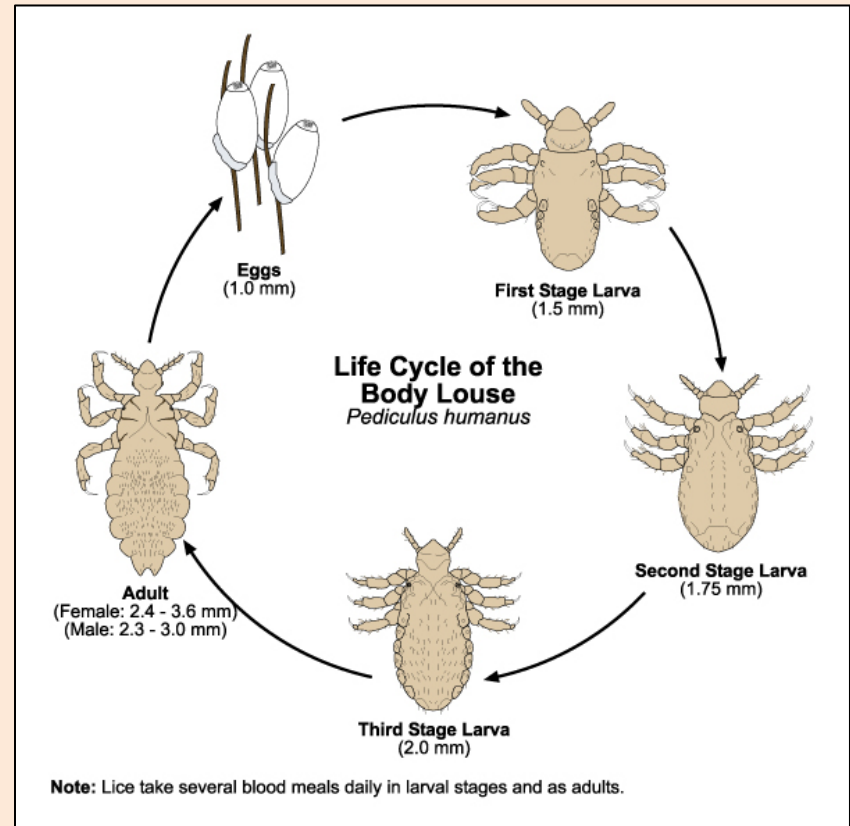
**Keyword: Pupae**

# **Classification of Insecta**

- **Kingdom: Animalia**
  - **Phylum: Arthropoda**
    - **Class: Insecta**
      - **Order: Diptera**
      - **Order: Phthiraptera**
      - **Order: Siphonaptera**
      - **Order: Blattodea**
      - **Order: Hemiptera**
      - **Order: Hymenoptera**
      - **Order: Coleoptera**
      - **Order: Lepidoptera**



# Order: Phthiraptera



Common name: **Lice**

Character: **Wingless, hook-like legs**

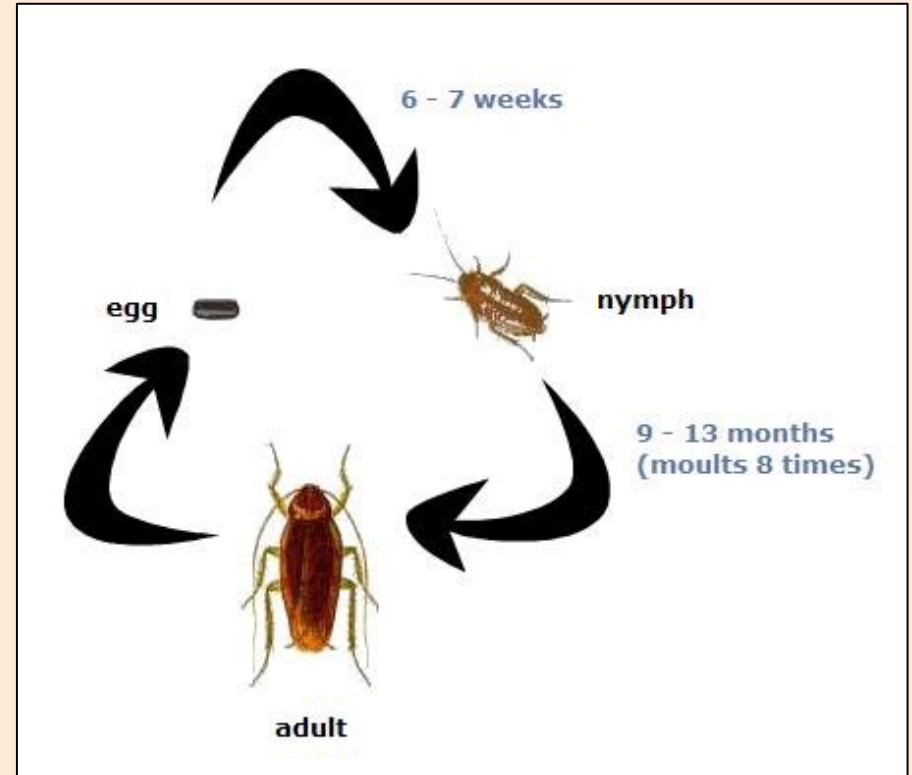
Metamorphosis: **Hemimetabolous**



# MedVet Importance: Lice



# Order: Blattodea

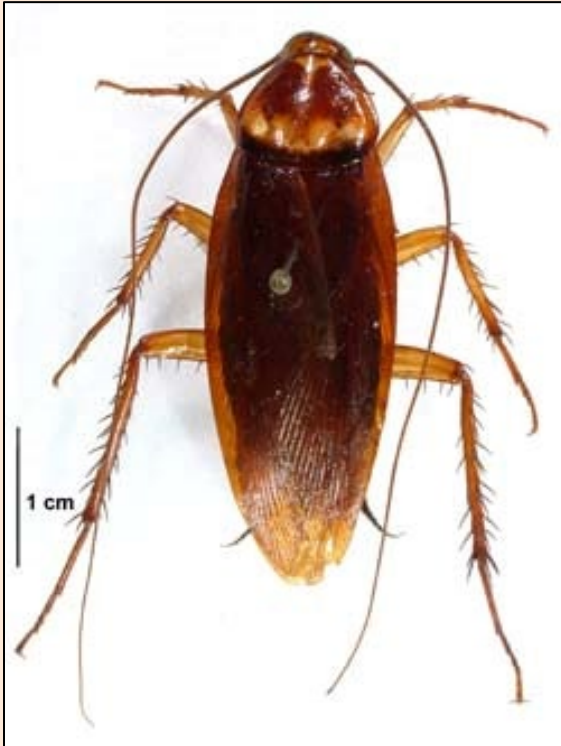


Common name: **Cockroaches**

Character: **Very long antennae**

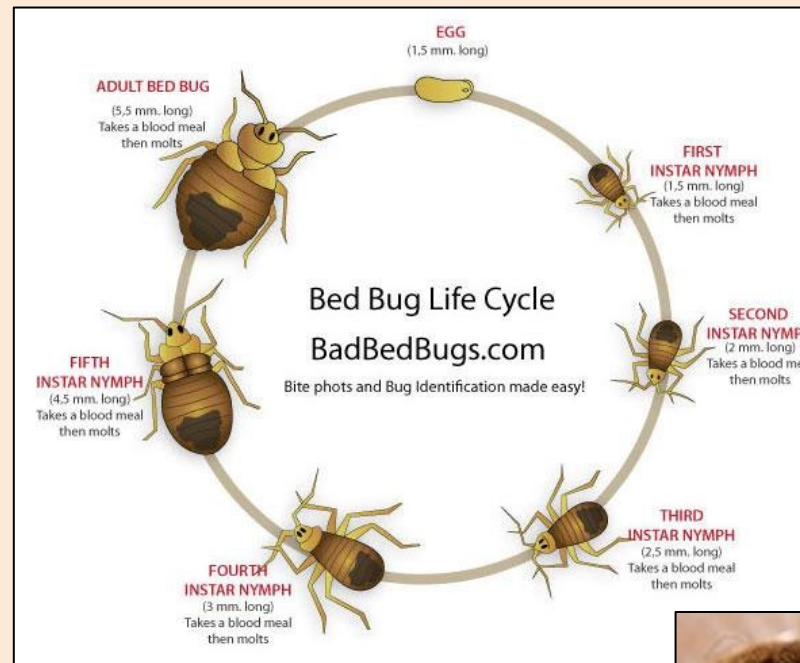
Metamorphosis: **Hemimetabolous**

# MedVet Importance: Cockroaches



**Mechanical transmission  
Allergens**

# Order: Hemiptera



Common name: **True bugs**

Character: **Piercing/sucking mouthparts**

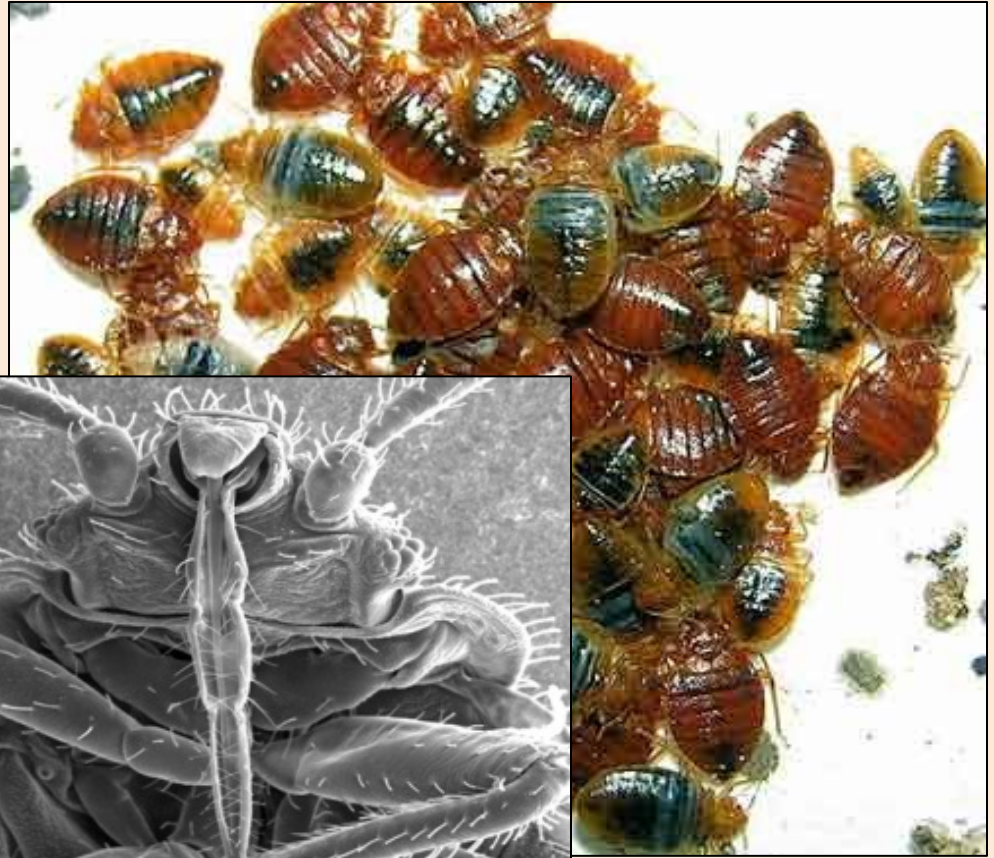
Metamorphosis: **Hemimetabolous**



# MedVet Importance: Bugs

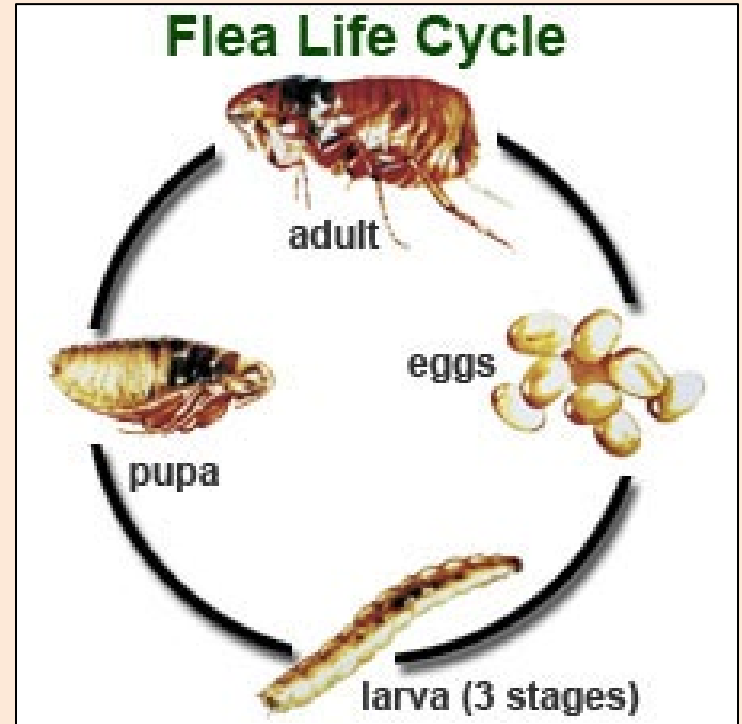


Kissing bugs



Bed bugs

# Order: Siphonaptera



Common name: **Fleas**

Character: **Thin and flattened**

Metamorphosis: **Holometabolous**

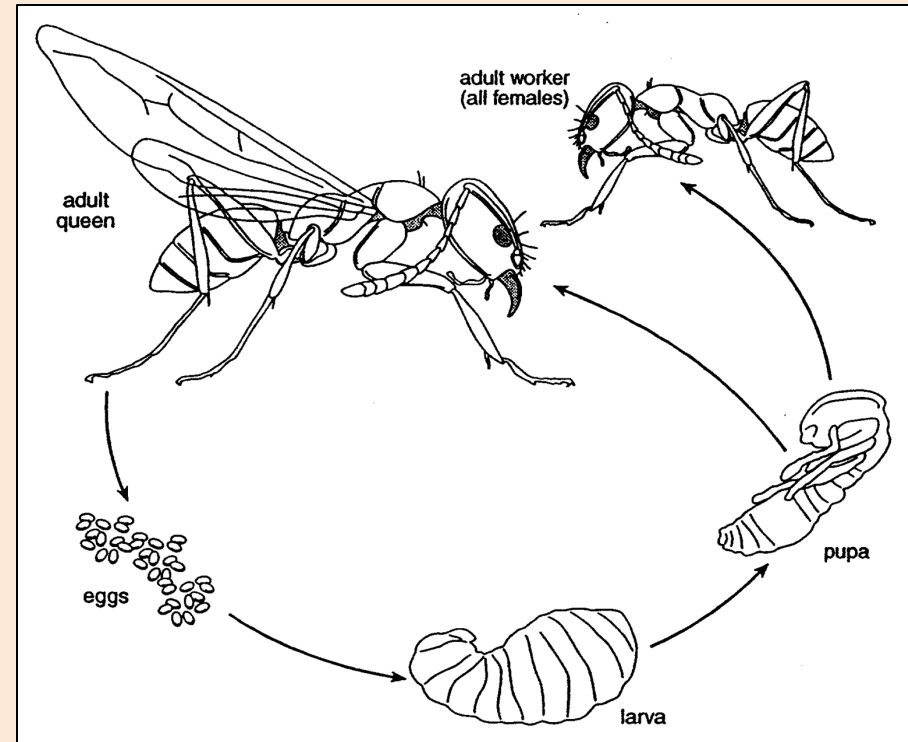
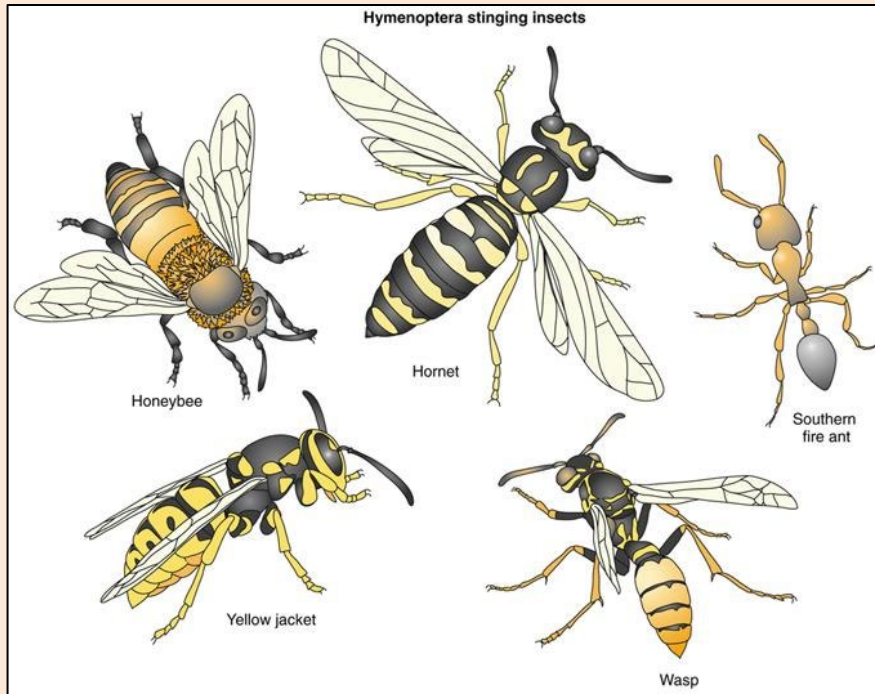
# MedVet Importance: Fleas



Human and animal



# Order: Hymenoptera



Common name: **Ants, Bees, and Wasps**

Character: **Chewing mouthparts, stingers**

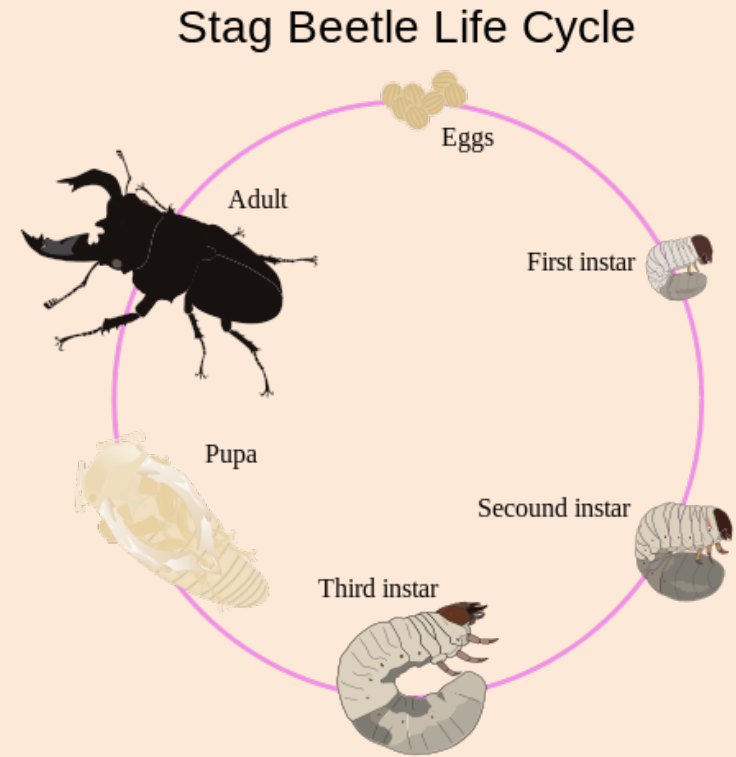
Metamorphosis: **Holometabolous**

# MedVet Importance: Stinging insects



Fire ants, velvet ants

# Order: Coleoptera



Common name: **Beetles**

Character: **Hardened forewings**

Metamorphosis: **Holometabolous**



# MedVet Importance: Beetles

**Blister beetles**



**Lesser mealworms (litter beetles)**

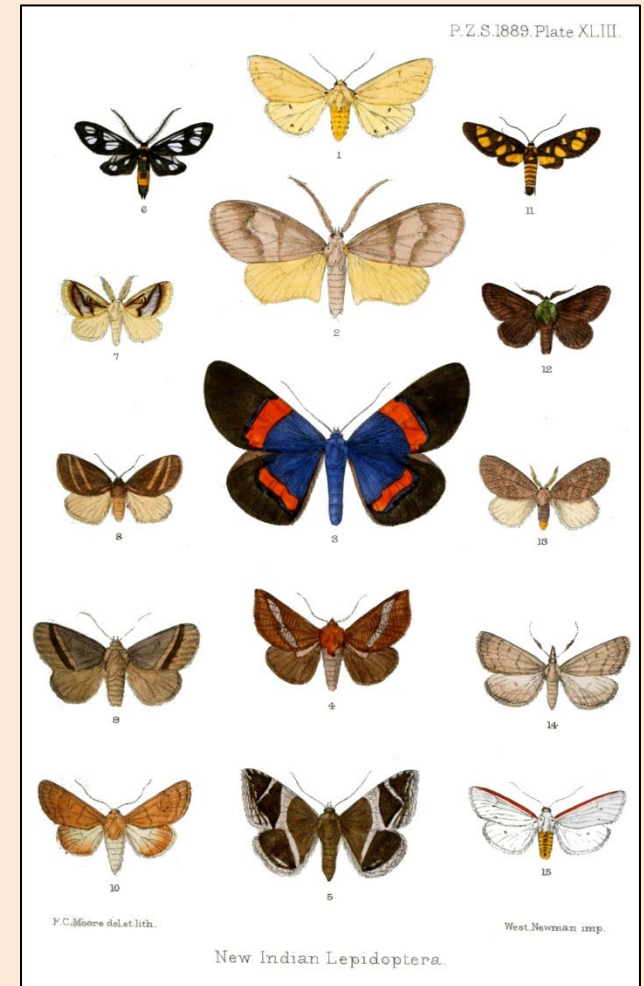
# Order: Lepidoptera



Common name: **Butterflies/Moths**

Character: **Fine scales on wings**

Metamorphosis: **Holometabolous**



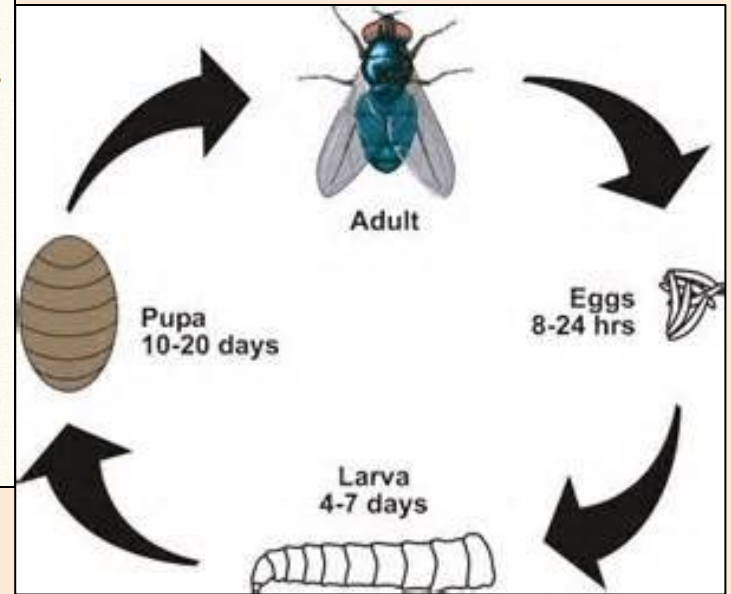
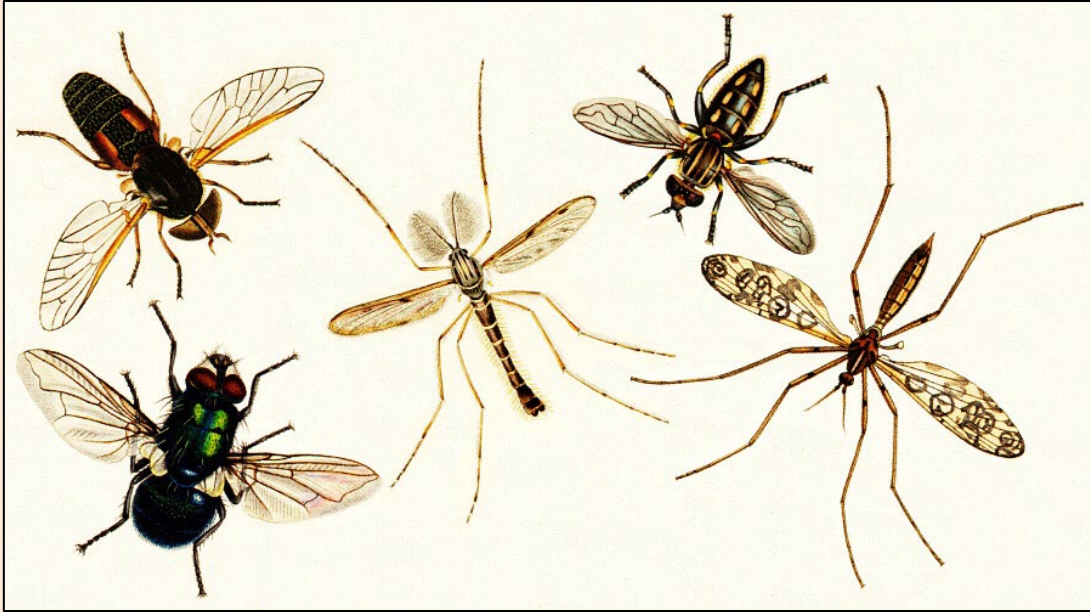
# MedVet Importance: Caterpillars



Skin irritants



# Order: Diptera



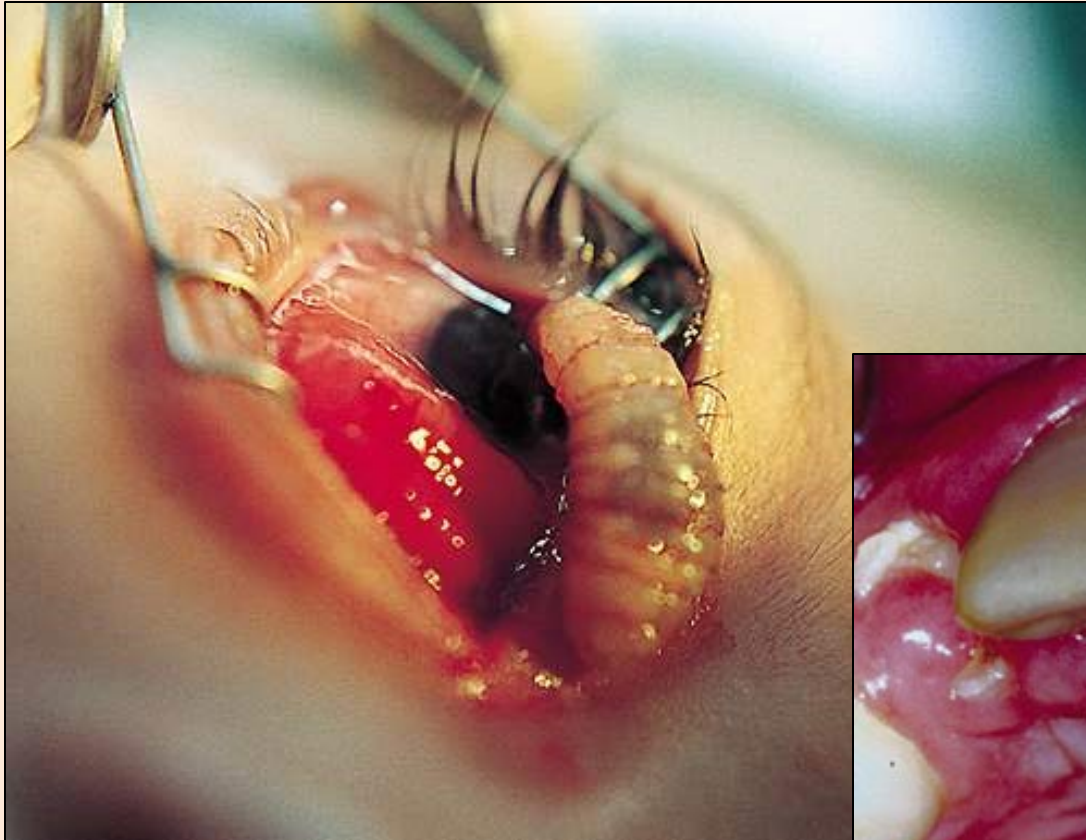
Common name: **Flies**

Character: **No hind wings (only one pair)**

Metamorphosis: **Holometabolous**



# MedVet Importance: Diptera



Myiasis

# Summary of Orders

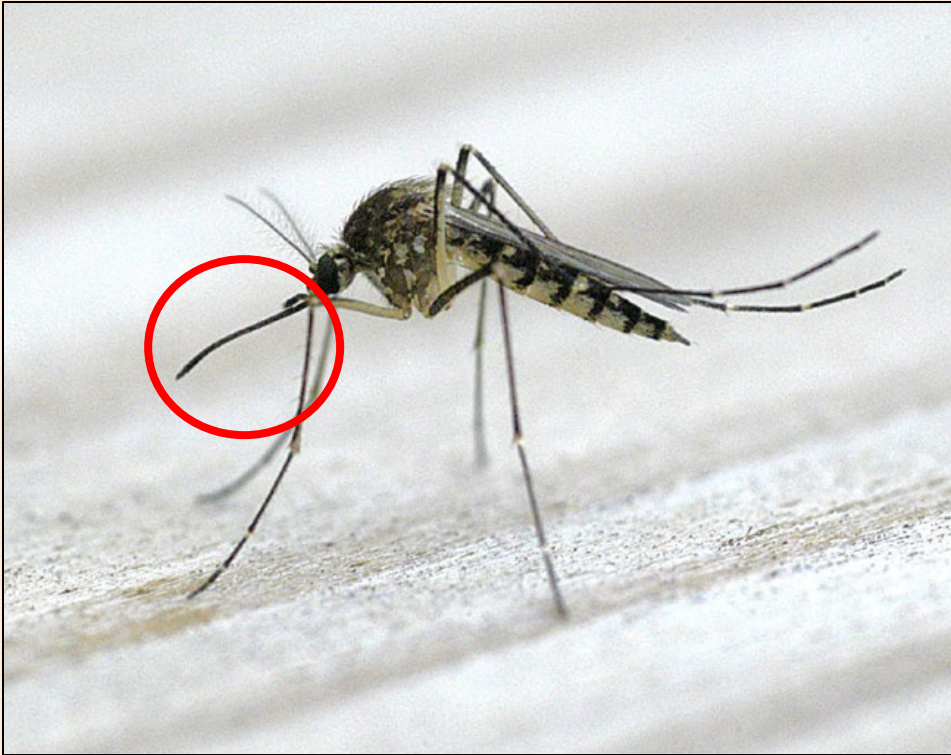
	Order	Common Name	Character
H e m i m e t a b o l o u s	<b>Blattodea</b>	<b>Cockroaches</b>	<b>Very long antennae</b>
	<b>Phthiraptera</b>	<b>Lice</b>	<b>Wingless, hook-like legs</b>
	<b>Hemiptera</b>	<b>True bugs</b>	<b>Piercing sucking mouthparts</b>
H o l o m e t a b o l o u s	<b>Hymenoptera</b>	<b>Ants/bees/ wasps</b>	<b>Chewing mouthparts, stingers</b>
	<b>Coleoptera</b>	<b>Beetles</b>	<b>Hardened forewings</b>
	<b>Siphonaptera</b>	<b>Fleas</b>	<b>Thin &amp; flattened</b>
	<b>Diptera</b>	<b>True flies</b>	<b>1 pr of wings</b>
	<b>Lepidoptera</b>	<b>Butterflies &amp; moths</b>	<b>Fine scales on wings</b>

# Order: Diptera

## Important families:

- **Culicidae**
- **Ceratopogonidae**
- **Simuliidae**
- **Psychodidae**
- **Tabanidae**
- **Muscidae**
- **Glossinidae**
- **Hippoboscidae**

# Family: Culicidae



Common name: **Mosquitoes**

Character: **Long piercing proboscis**

# Family: Ceratopogonidae



Common name: **Biting midges**

Character: **Long, beaded antennae**



# Family: Simuliidae



Common name: **Black flies**

Order: Character: **Short antennae**

# Family: Psychodidae

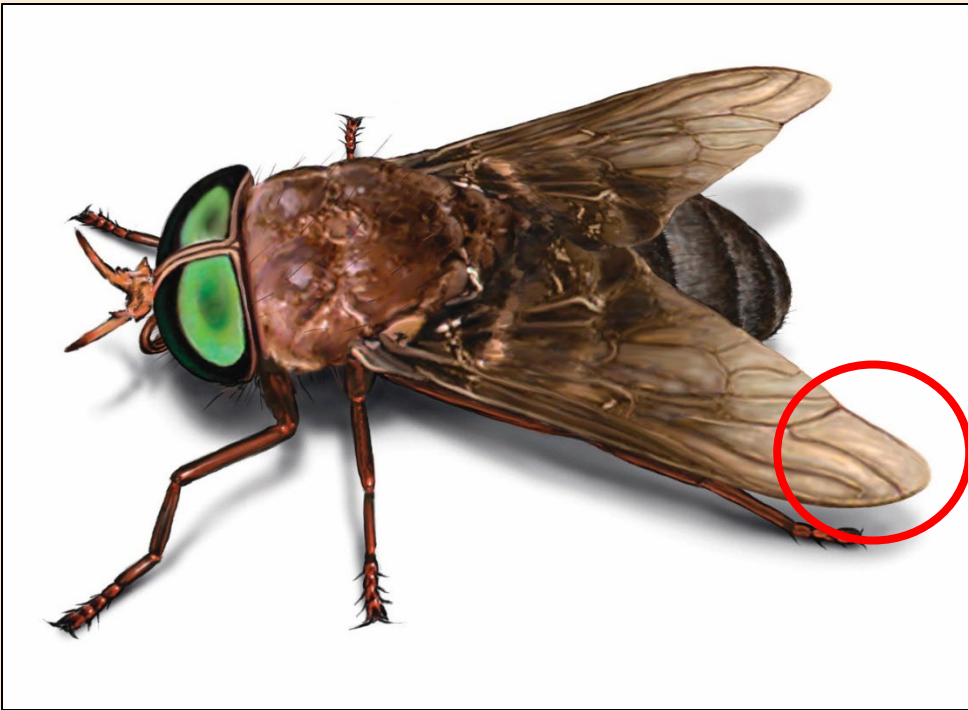


Common name: **Moth and sand flies**

Character: **Parallel wing veins**



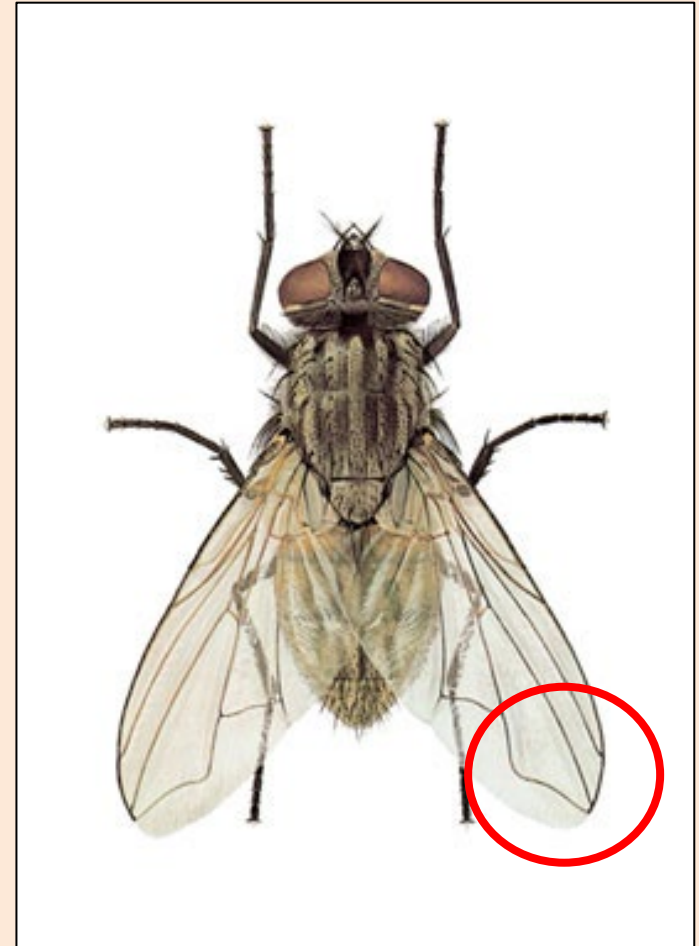
# Family: Tabanidae



Common name: **Horse & deer flies**

Character: **No vein at tip of wing**

# Family: Muscidae



Common name: **House & stable flies**

Character: **Vein at tip of wing, bristly body**

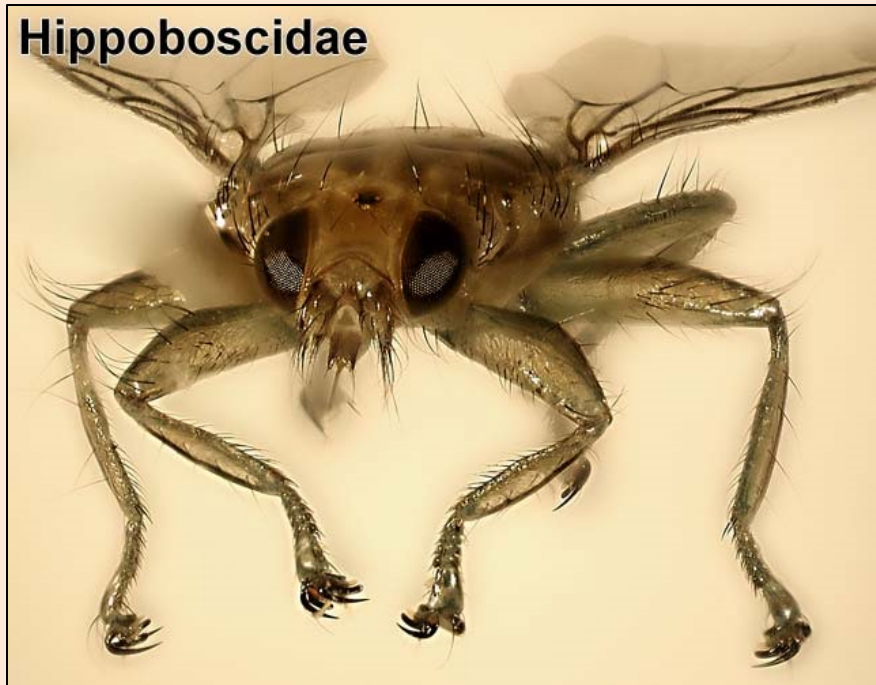
# Family: Glossinidae



Common name: **Tsetse flies**

Character: **Piercing mouthparts, not bristly**

# Family: Hippoboscidae



Common name: **Louse flies**

Character: **Dorsally flattened, hook-like legs**

# Classification of Arachnids

- **Kingdom: Anamalia**
  - **Phylum: Arthropoda**
    - **Class: Arachnida**
      - **Order: Acari**
      - **Order: Araneae**
      - **Order: Solifugae**
      - **Order: Scorpiones**



# Order: Acari



Common name: **Ticks and mites**

# MedVet Importance: Ticks and Mites



Lyme disease, mange



# Order: Araneae



Common name: **Spiders**

# MedVet Importance: Spiders



Brown recluse



# Order: Solifugae



Common name: **Camel and sun spiders**

# MedVet Importance: Camel spiders





# Order: Scorpiones



Common name: **Scorpions**

# MedVet Importance: Scorpions

