

3. Class: Insecta (cut into sections):

Characteristics:

- Insects are freelifving on land, air, water, but few are parasites like, Human lice.
- Body divided into three distinct regions as follow:
 - Head is consisted of 6 fused segments and bears compound eyes, two antenna and mouth part adapted.
 - Thorax comprises three free segments, each bearing two legs and two pair of wings born on the second and third segments.
All Insects have six legs, as well as Antennae and Wings are found.
 - Abdomen comprises (7-11) segments, and devoid of appendages.
- Reproduction is sexual. Lifecycle is indirect that includes larva, which is called Naiad, Nymph or Caterpillar & Pupa forms. The larva undergoes several moultings with each molting some changes are happened in the insect form, this process is called **Metamorphosis** (changing in form).

Metamorphosis includes 3 types, as follow:

A- Incomplete Metamorphosis:

Egg - in water- → Naiad larva → Adult -e.g., Odonata

B- Gradually Metamorphosis:

Egg - on land- → Nymph larva → Adult -e.g., Locusta

C- Complete Metamorphosis:

Egg → Caterpillar larva → Pupa larva → Adult -e.g., Butterfly

Example:

Kingdom: Animalia

Phylum: Arthropoda

Class: Insect

1. Order: Phthiraptera

Family: Pediculidae

Pediculus humanus capitis (human head louse)



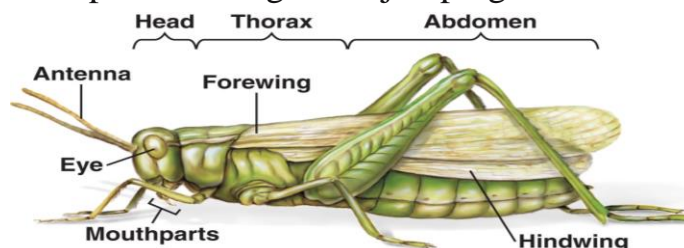
- Apterous is a louse that infests humans on head is known as **pediculosis**.
- Legs modified for cling to hair.

2. Order: Orthoptera

Family: Acrididae

Schitocera gregaria

- Winged, hind legs in almost all species enlarged for jumping



4. Class: Chilopoda (centipedes or fewer legs, i.e., one leg per segment):

Kingdom: Animalia

Phylum: Arthropoda

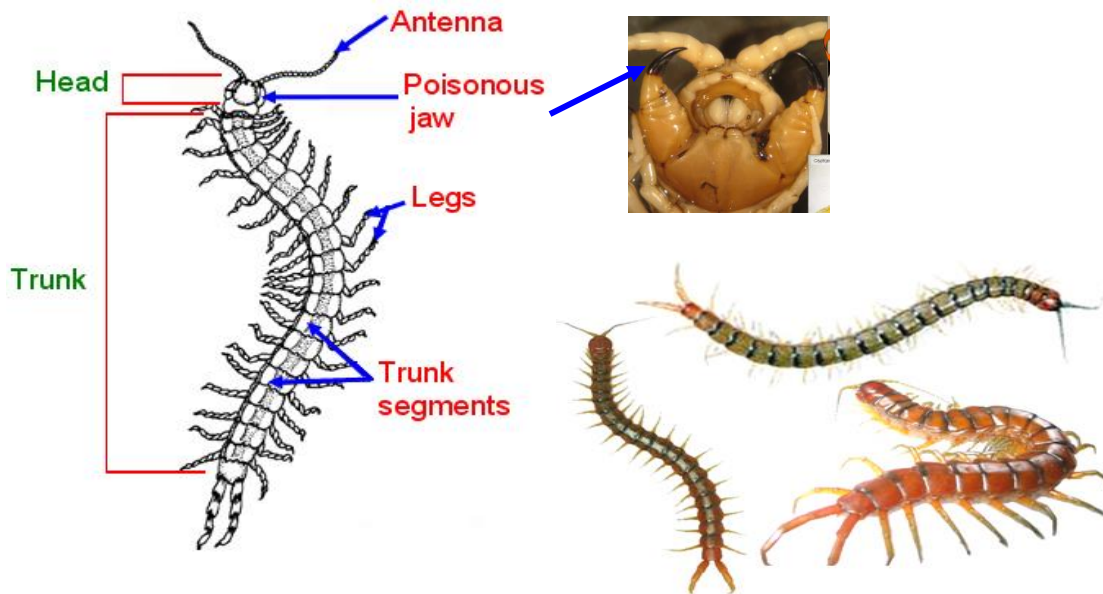
Class: Chilopoda

Order: Scolopendromorpha

Family: Scolopendridae

Scolopendra sp.

1. Head bears one pair of long antennae.
2. Body consists of 15 - 173 segments, each of which bears one pair of legs.
3. First legs are modified to poisonous jaws that are used for defense and capturing prey, so they feed on insect, other Arthropoda, worm and Mollusca.



5. Class: Diplopoda (millipedes, i.e., two legs per segment): Example:

Kingdom: Animalia

Phylum: Arthropoda

Class: Diplopoda

Order: Julida

Family: Julidae

Julus sp.

1. Head bears one pair of short antennae.
2. Body consists of 25 - 105 segments, each of which bears two pair of legs.
3. They lack poisonous jaws and feed on decaying vegetable or plant.

