

## Lecture 5 : Arachnida Class

### العنكبوتيات

#### General Characterizations :

- 1 – All members of Arachnida are terrestrial and segmented body .
- 2 – They have tough exoskeleton and jointed walking legs.
- 3 – Body divided into two segments ( Cephalothorax and abdomen ) .
- 4 – Four Pairs of legs , one pair attached in each segment of cephalothorax region .
- 5 - Most Arachnida are predators .

#### Scorpion :

### العقرب

- 1 – Predator arachnida have eight legs with pair grasping pincer .
- 2 – It has narrow segmented tail , forward curved over the back and always end with stinger .

**3 - Scorpion live in desert mainly but adapted to very wide range of environmental condition .**

**4 - Scorpion are 2500 species , found in all continents except Antarctica .**

**5 – Scorpions are prey on insects and other invertebrates**

**6 - The venoms sting is used for offensive and defense .**

**7 - Muscles ( striated muscles ) attached to the inner wall of the cuticle .**





## **Spider :**

### **العنكبوت**

- 1 . 46700 species of spider found in arachnida .**
- 2 . Spider have eight legs not like insect have six legs .**
- 3 . It has chelicera to inject venom .**
- 4 . All spiders are predator insect .**
- 5 . Use silk to kill prey , capture prey and quickly inject venom . others wrapping silk to immobilize their victims .**
- 6 . Body length of spider range from 0.5 \ 90 mm .**
- 7 . Female spiders are larger than males ( small and light )**
- 8 . Spider produce silk thread { Orb. wheel shaped } that found in gardens , fields and forests .**

## **9 . Spider widow or black widow or red black**

**Female completely black .**



## **Ticks :**

**1 - Are external Parasites , living by feeding blood of mammals , birds , and sometimes reptiles and amphibians**

**2 - There are two families of ticks for domestic animals :**

**A ; Argasidae      B : Ixodidae**

**3 – Adult ticks 3 - 5 mm in length .**

**4 – Tick widely distributed around the world especially in warm humid climate .**

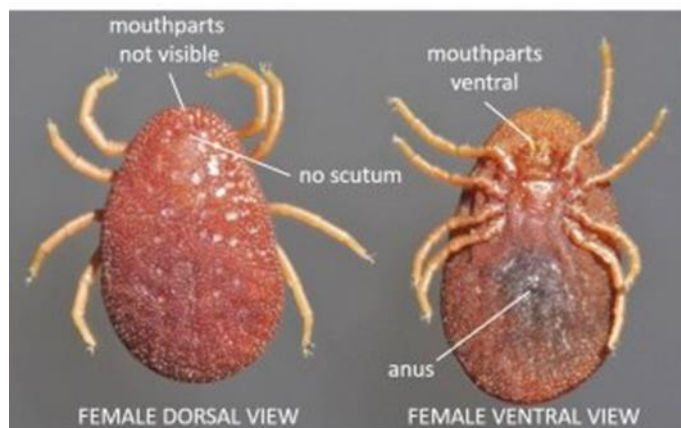
**5 – Cephalothorax and abdomen of ticks are completely fused .**

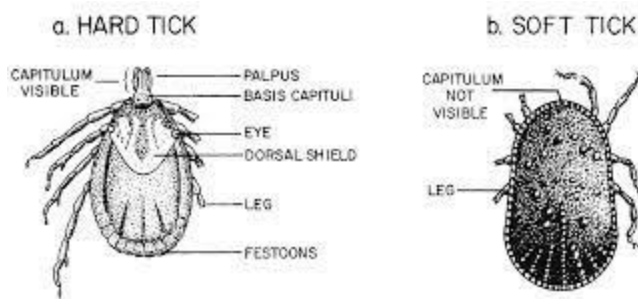
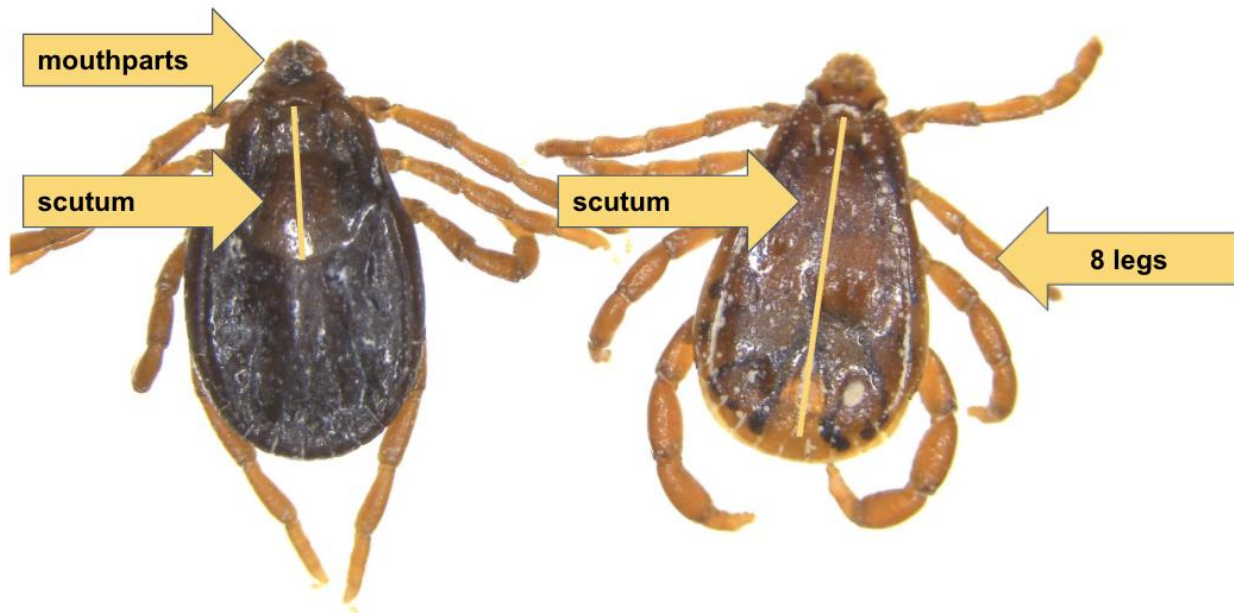
6 - Hard tick have shield on the dorsal surface known as scutum .

7 - Soft ticks blow up like balloon when feed blood because they dont have scutum .

8 -- Hard ticks have scutum so they are not able to take blood as much as soft ticks .

9 - Ticks have four life stages ; Egg , six legged larvae , eight legged nymph , Adult .





## Mites الحلم



## Mites

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**1 - Small tiny arthropoda ( microscopical ) in size 250 to 750 micron .**

2 . It has eight legged , un segmented body .

3 . Mites are parasite for human , Domestic animals and plants . Burrow tunnel by legs inside the skin to lay eggs at the end of tunnel .

4 . Cause intense itching especially at night produce skin rash , blisters due to infection ( infestation ) by *Sarcoptes scabie* .

5 . This disease called Scabie for human and Mange for animals .

