

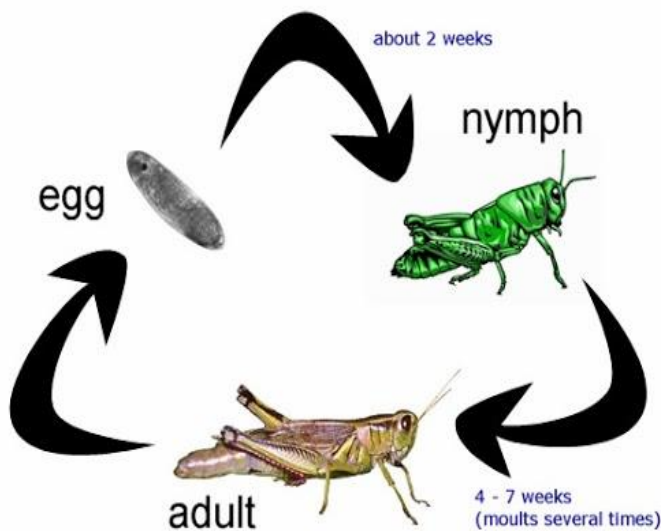


**FACULTY OF AGRICULTURAL SCIENCES & ALLIED INDUSTRIES**

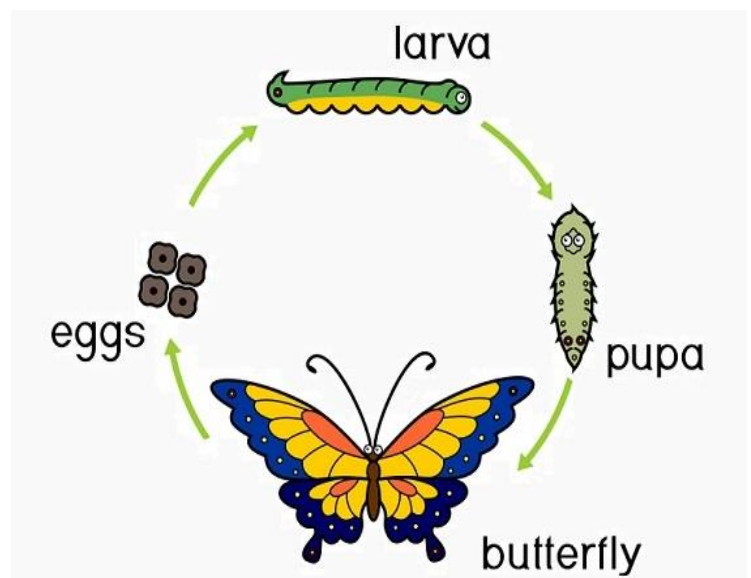
# ENT-121: Fundamentals of Entomology

## Lecture 7: Metamorphosis:

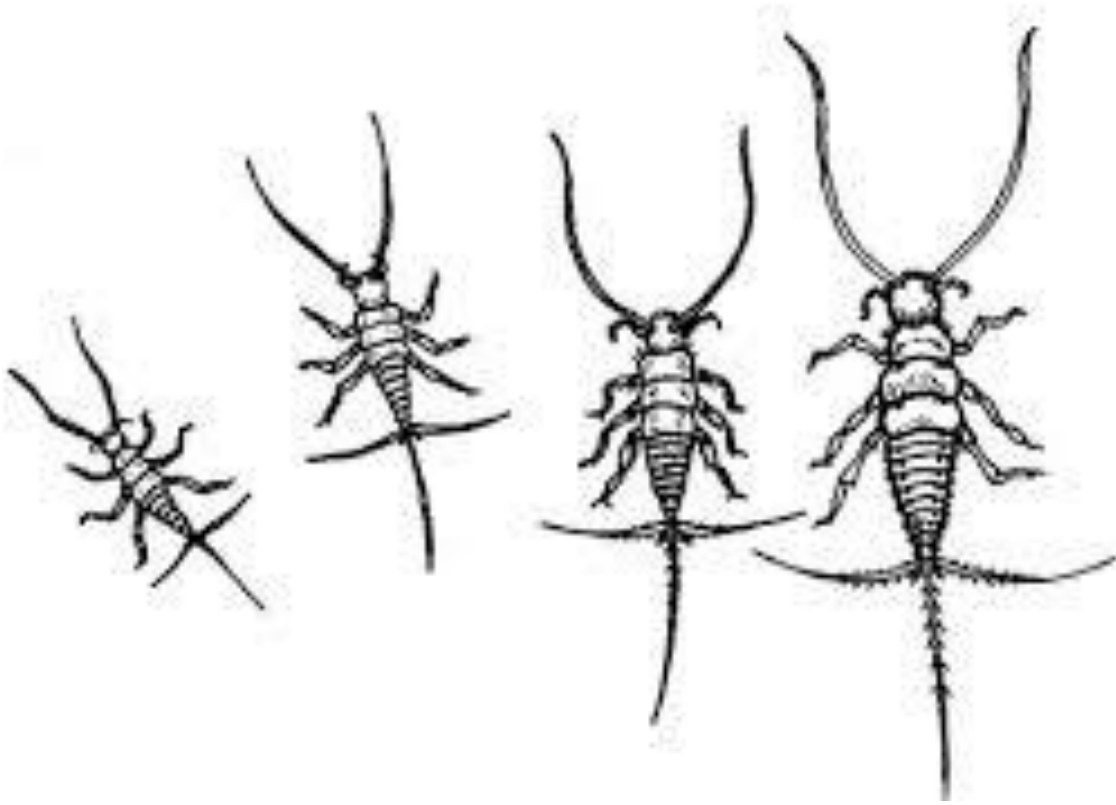
- 1. Ametabola:** (No metamorphosis) e.g. Silver fish.
- 2. Hemimetabola:** (Incomplete metamorphosis) e.g. Dragonfly, damselfly and mayfly. These insects also have three stages in their life namely egg, young one (naid) and adult.
- 3. Paurometabola:** (Gradual metamorphosis) e.g. Cockroach, grasshopper, bugs. The young ones are called nymphs. They are terrestrial and resemble the adults in general body form except the wings and external genitalia.
- 4. Holometabola:** (Complete metamorphosis) e.g. Butterfly, moth, fly and bees. These insects have four life stages namely egg, larva, pupa and adult. Majority of insects undergo complete metamorphosis.



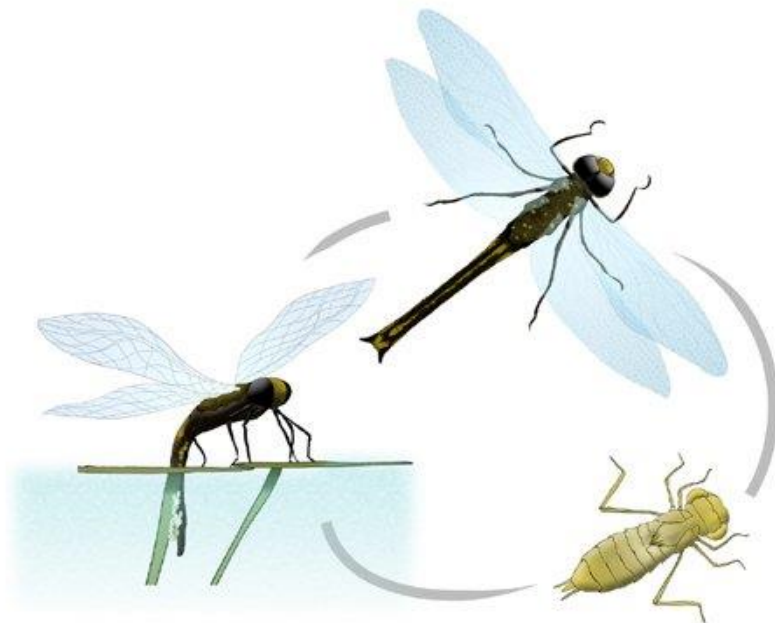
Incomplete (Paurometabola) Metamorphosis (Grasshopper)  
(Butterfly)



Complete Metamorphosis



Ametabola Type of Metamorphosis



Hemimetabola in Dragonfly