

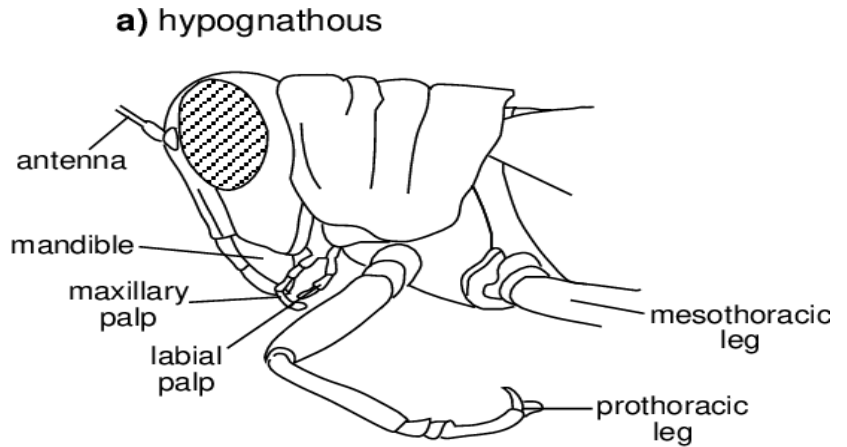


**FACULTY OF AGRICULTURAL SCIENCES & ALLIED INDUSTRIES**

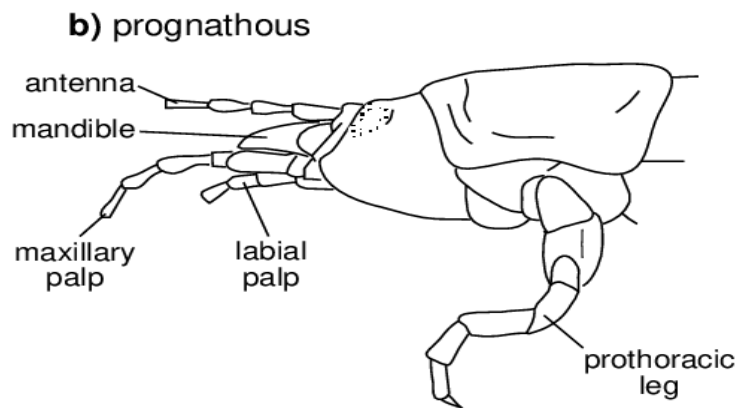
# ENT-121: Fundamentals of Entomology

## Lecture 9: Head Orientation:

**1. Hypognathous:** (Hypo-below; gnathous-jaw) This type is called orthopteroid type. The long axis of the head is vertical; it is at right angles to the long axis of the body. Mouth parts are ventrally placed and project downwards. E.g. grasshopper, cockroach.



**2. Prognathous:** (Pro-infront; gnathous-jaw) This type is also called coleopteroid type. The long axis of the head is horizontal. It is in line with the long axis of the body. Mouth parts are directed forward. e.g. ground beetle.



**3. Opisthognathous:** (Opistho-benind; gnathous-jaw) this is also called hemipteroid type or opisthorhynchous type. Head is deflexed. Mouthparts are directed backwards and held in between the forelegs. E.g. stink bug.

