

Table 13.1. Presumed homologies among head segments and appendages.

| ganglion of nerve chord¹ | <u>Chelicerata</u> | <u>Crustacea</u> | <u>Myriopoda</u> | <u>Hexapoda</u> |
|--|---------------------------|-------------------------|-------------------------|------------------------|
| acron (archi- cerebrum) | eyes | eyes | eyes | eyes |
| (1)protocerebrum | - | - | labrum | labrum |
| (2)deutocerebrum | - | 1st antennae | antennae | antennae |
| (3)tritocerebrum | chelicerae | 2nd antennae | intercalary | intercalary |
| (4)mandibular ² | pedipalps | mandible | mandible | mandible |
| (5)maxillary | 1st leg | 1st max. | 1st max. | maxilla |
| (6)labial | 2nd leg | 2nd max. | 2nd max. ³ | labium |
| (7)prothoracic | 3rd leg | 1st maxilliped | 1st leg | 1st leg |
| (8)mesothoracic | 4th leg | 2nd maxilliped | 2nd leg | 2nd leg |
| (9)metathoracic | - | 3rd maxilliped | 3rd leg | 3rd leg |

¹ Numbering system based on Rempel (1975). Acron is first (non-segmental) region of the body and is followed by sequentially numbered metameres, each with its own ganglion, coelomic sac and (primitively) appendage. Primitively, all segments other than acron were postoral. However, ganglia have migrated forward to varying degrees and the mouth in most extant Arthropods is located between the tritocerebral and mandibular ganglia.

² Ganglia of mandibular, maxillary and labial segments fused in Arthropods into a single sub-esophageal ganglion.

³ The second maxillae in most Myriopoda are distinct, segmental structures, however, in Pauropods they have fused medially to form a “labium” which is probably not homologous to the insect labium.