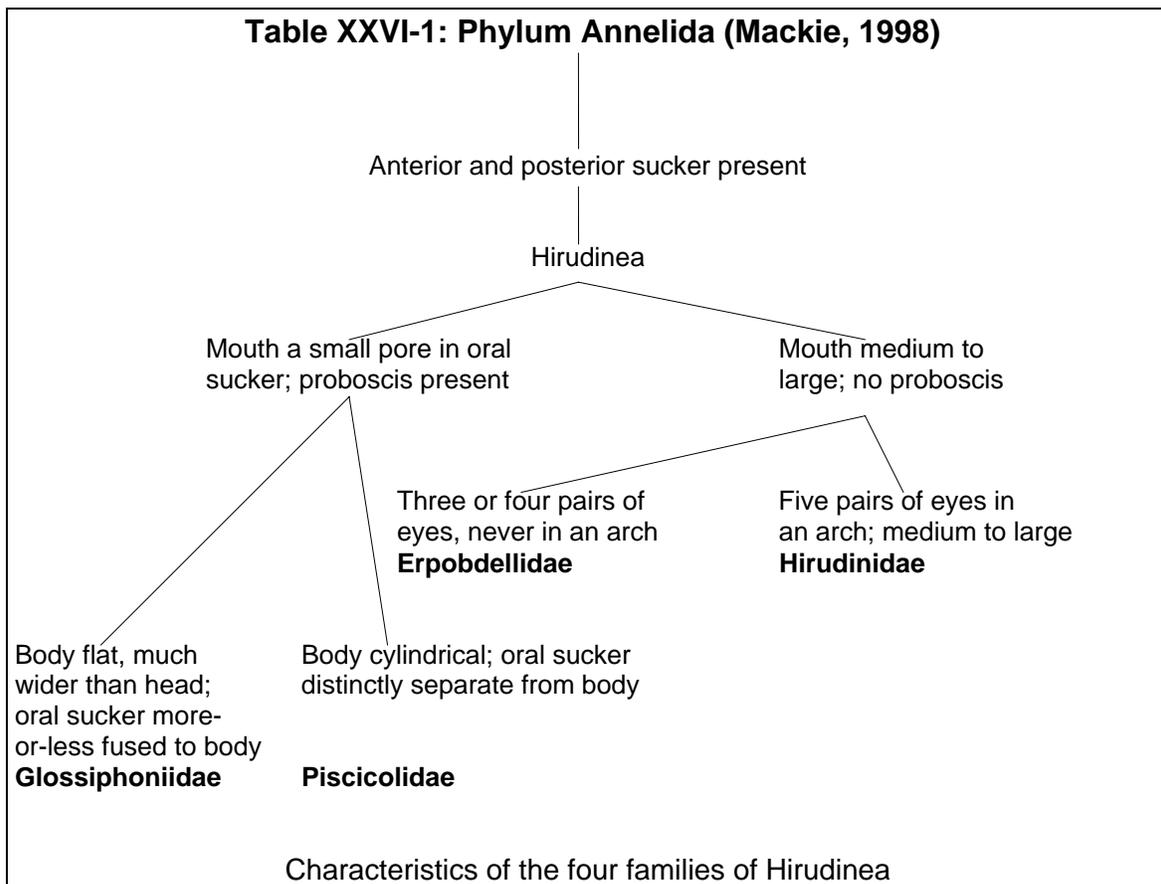


Chapter XXVI —Class Hirudinea



(Leeches and Bloodsuckers)— Phylum Annelida

The class Hirudinea in the phylum Annelida (segmented worms) comprises the leeches, the most highly specialized of the major annelid groups.



Leeches are typically dorsoventrally flattened annelids with suckers at both ends and 34 body segments (designated I-XXXIV) which are externally divided into a number of annuli. Most species in North America are found in fresh and marine waters, but many terrestrial species occur in tropical regions. As predators, parasites of animals, vectors of parasites, and as food for semiaquatic and aquatic animals, leeches are important components of food webs. In northeastern North America, there are about 42 species. Leeches are hermaphroditic but do not self-fertilize. (Peckarsky et al., 1990)

The class Hirudinea comprises two orders: Arhynchobdellida and Rhynchobdellida:

- The arhynchobdellids are divided into three families: Haemopidae, Hirudinidae, and Erpobdellidae. The haemopids and hirudinids have relatively large mouths, occupying the entire cavity of the oral sucker. The haemopids are chiefly aquatic or amphibious, are good swimmers, and are considered blood-sucking or predaceous leeches. The hirudinids are aquatic, are also good swimmers, and are considered truly sanguivorous leeches. The erpobdellids have medium-sized mouths that occupy the entire cavity of the oral sucker. The erpobdellids are strictly aquatic, are good swimmers, and prey on small invertebrates.
- The rhynchobdellids are strictly aquatic leeches that have small, porelike mouths in the oral sucker. The families Glossiphoniidae and Piscicolidae belong to this order. The glossiphoniids have three annuli on each body segment. Many are ectoparasites on both invertebrates and vertebrates, and some forms are predaceous on invertebrates. The piscicolids usually have more than three annuli on each body segment and are parasites of many fishes and rarely of crustaceans.

Habitat

Leeches are most common in warm, protected shallows where there is little disturbance from currents. Free-living leeches avoid light and generally hide and are active or inactive under stones or other inanimate objects, among aquatic plants, or in detritus. Some species are most active at night.

Silted substrates are unsuitable for leeches because they cannot attach. Leeches are usually rare in calcium-poor waters. Some species can tolerate mild pollution.

References

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