

Rhipicephalus sanguineus (brown dog tick)



Dorsal

Ventral

Geographic Distribution: Nearly worldwide.

Medical Importance: Generally considered a nuisance pest but has been implicated in localized cases and outbreaks of *Rickettsia rickettsii* (Rocky Mountain spotted fever) in North America and transmits *Rickettsia conorii* (boutonneuse fever) in the Old World.

Key Morphologic Features: Mouthparts short, similar in length to basis capituli; dorsal shield inornate (lacking white maculae or other ornamentation but may have dark maculae); eyes and festoons present; basis capituli (BC) strongly angulate, especially when viewed ventrally.

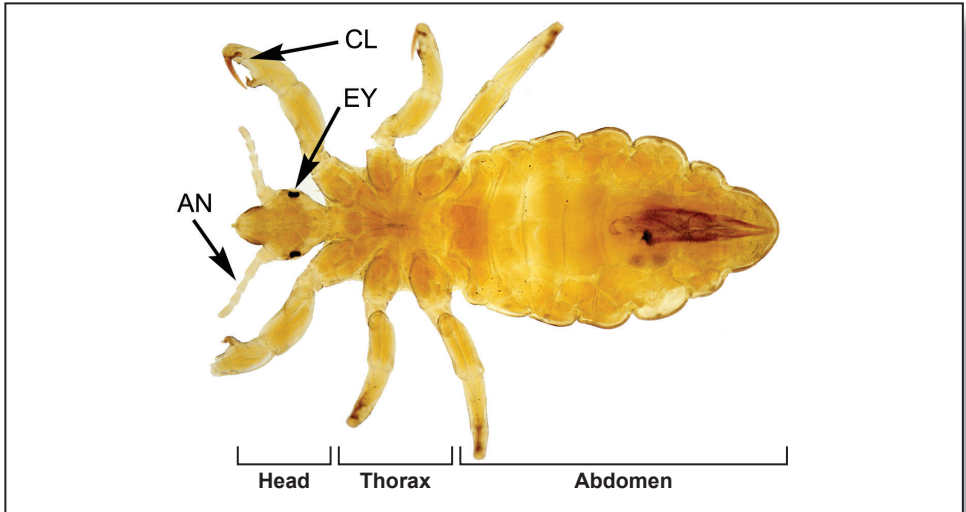
Demodex species: Morphology



Morphology: *Demodex* species are slender and elongate. Adult *D. folliculorum* mites are 294 μm long on average; *D. brevis* measure 208 μm long on average. The mites have 3 distinct body regions:

- Gnathosoma: the anterior area, which contains the mouthparts.
- Podosoma: central area, which contains 4 pairs of short, subequal legs (right).
- Opisthosoma: long, posterior half (or more) of the body.

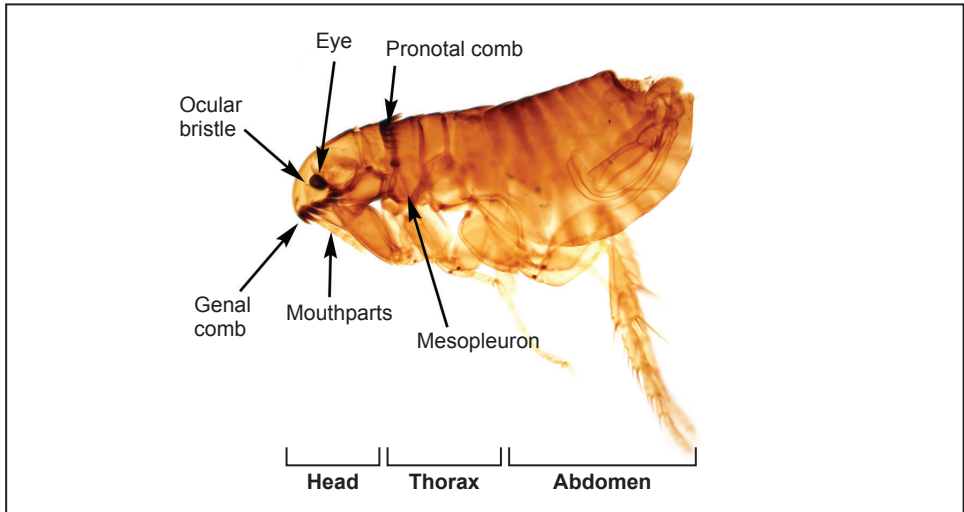
Lice: Morphology (adults)



Morphology: Adult human lice can be recognized by the following characteristics:

- Three distinct body regions (head, thorax, abdomen).
- Raptorial tarsal claws (CL) adapted for grasping hair shafts.
- One pair of five-segmented antennae (AN) and one pair of eyes (EY).
- Absence of wings.
- Piercing-sucking mouthparts.

Fleas: Morphology



Key Morphologic Features: Adult fleas may be recognized by the following characteristics:

- Laterally-compressed (side-to-side) body.
- Presence of eyes (usually) and antennae.
- No wings.
- Hind legs modified for jumping.
- Presence/absence of pronotal or genal combs.
- Mouthparts adapted for piercing, sucking.