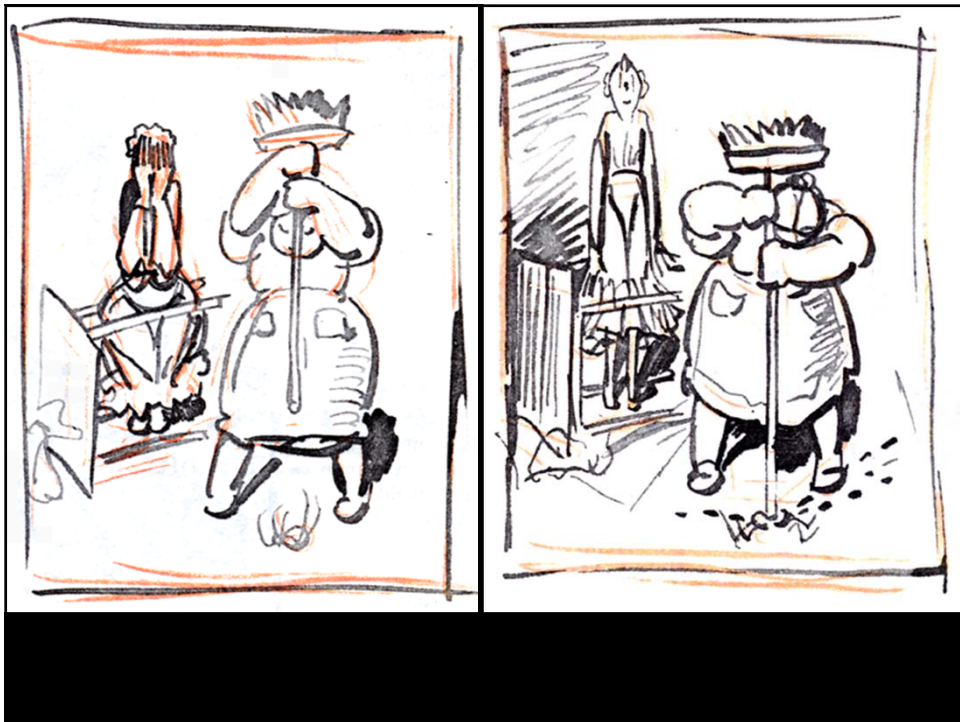
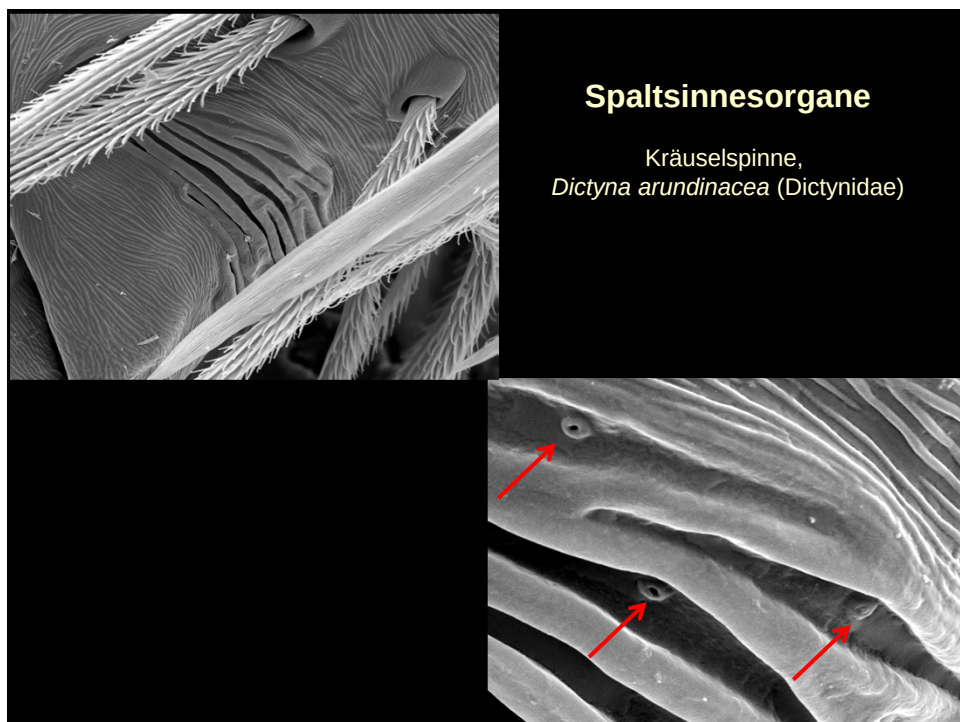
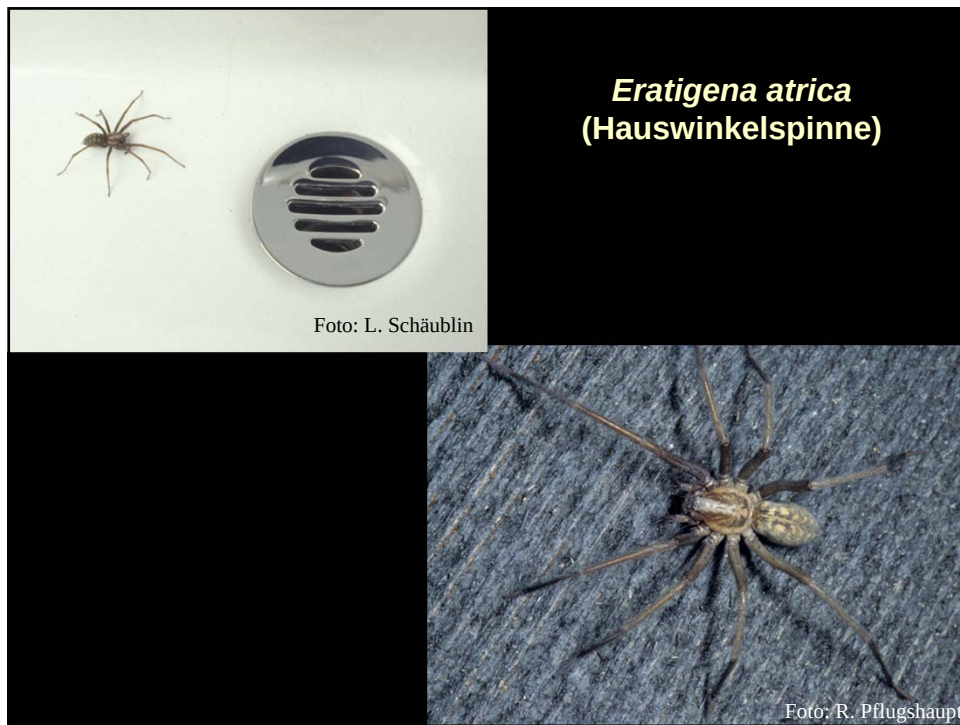
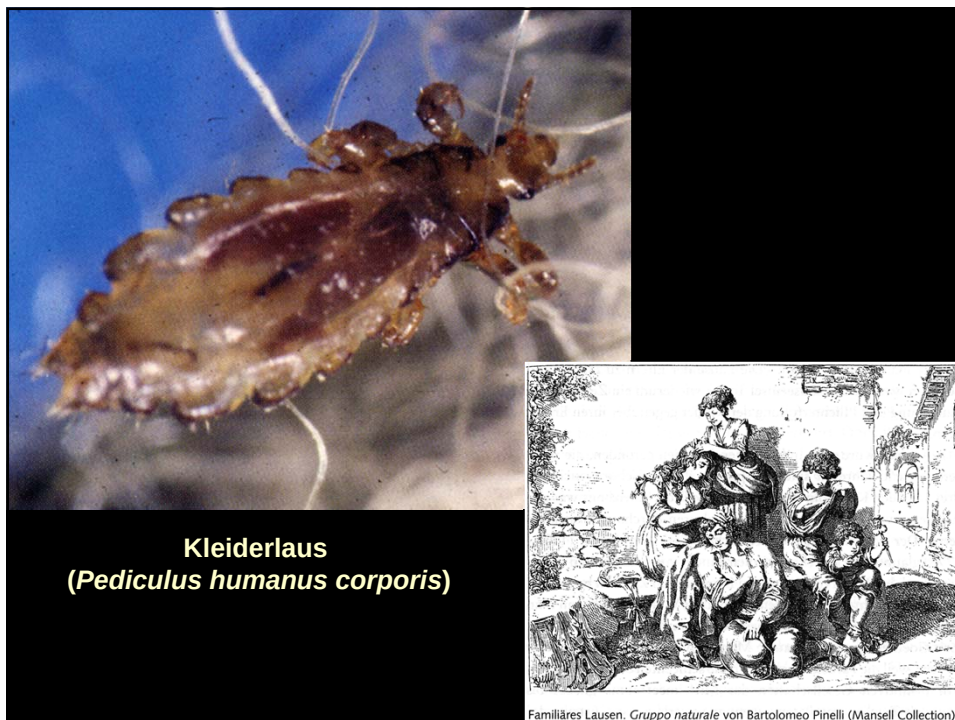
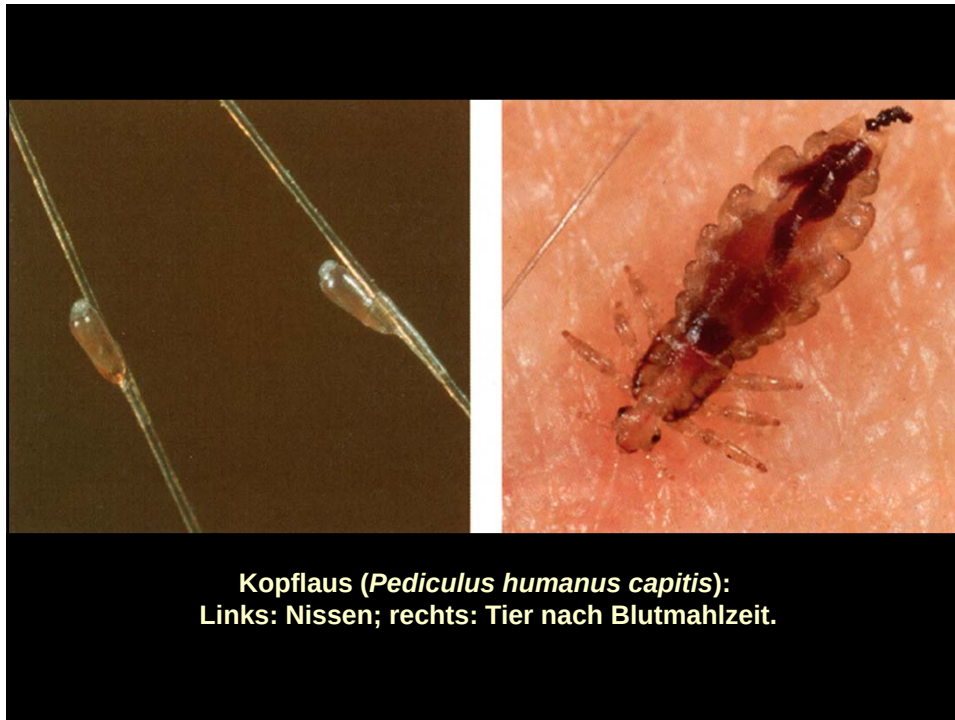




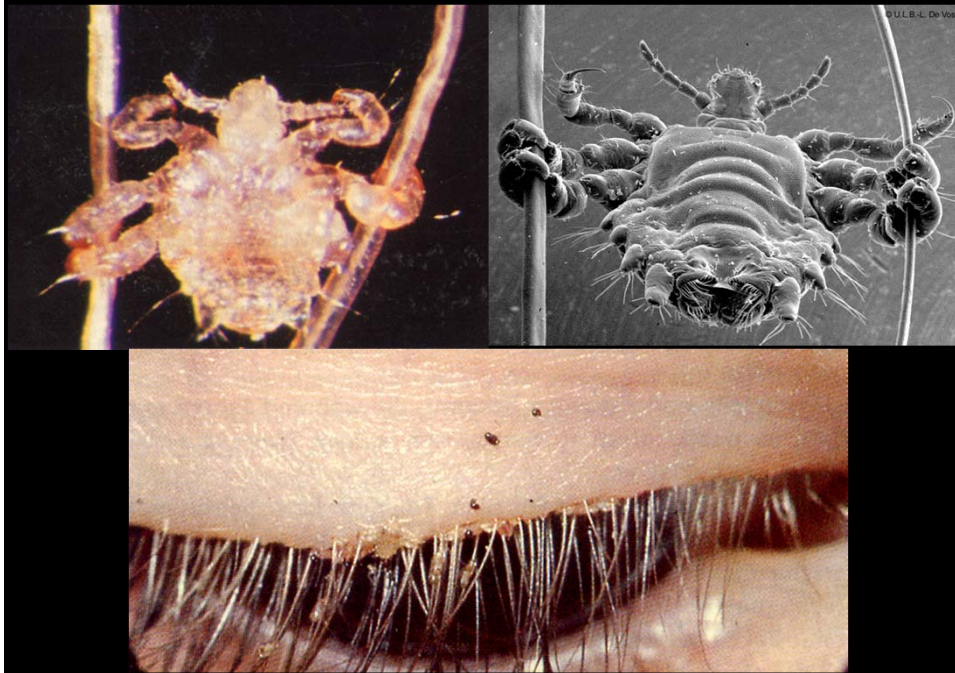




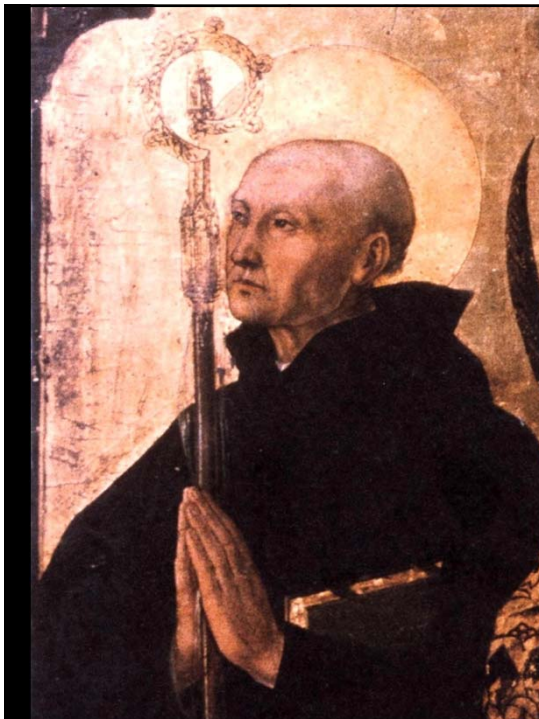




Filzlaus (*Phthirus pubis*)



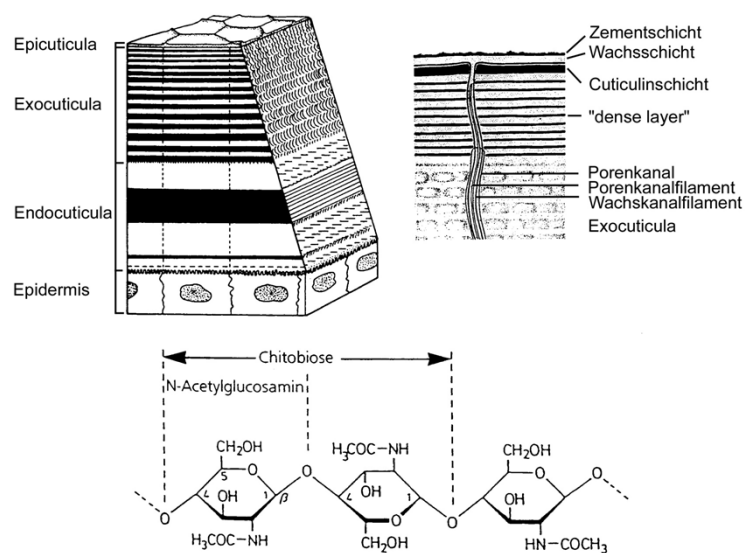
Hl. Severin von Noricum
(~ 410 – 482)



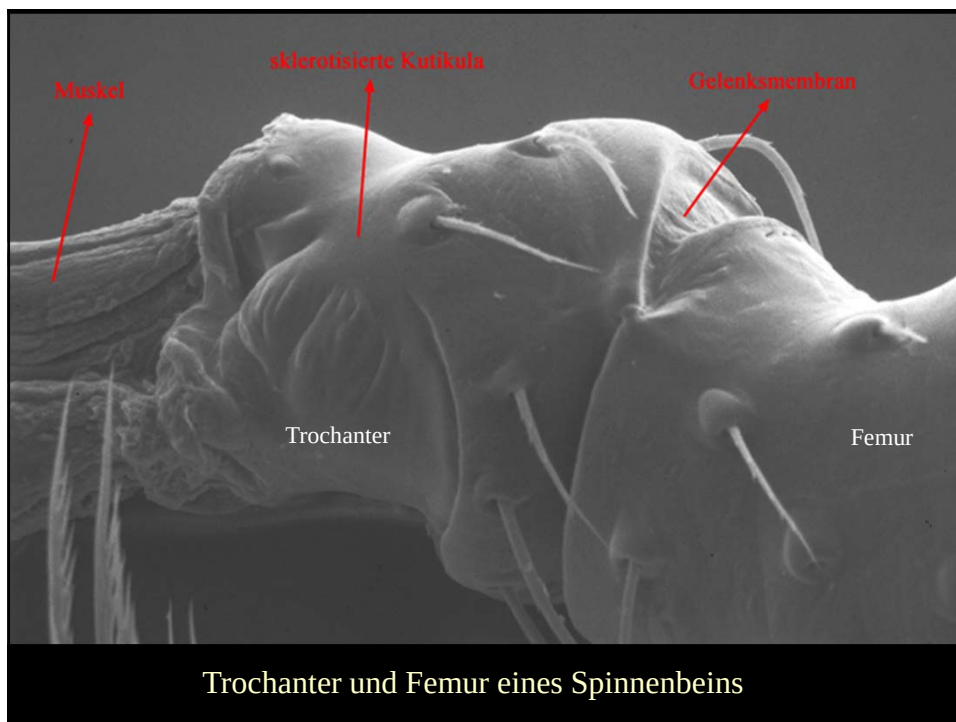
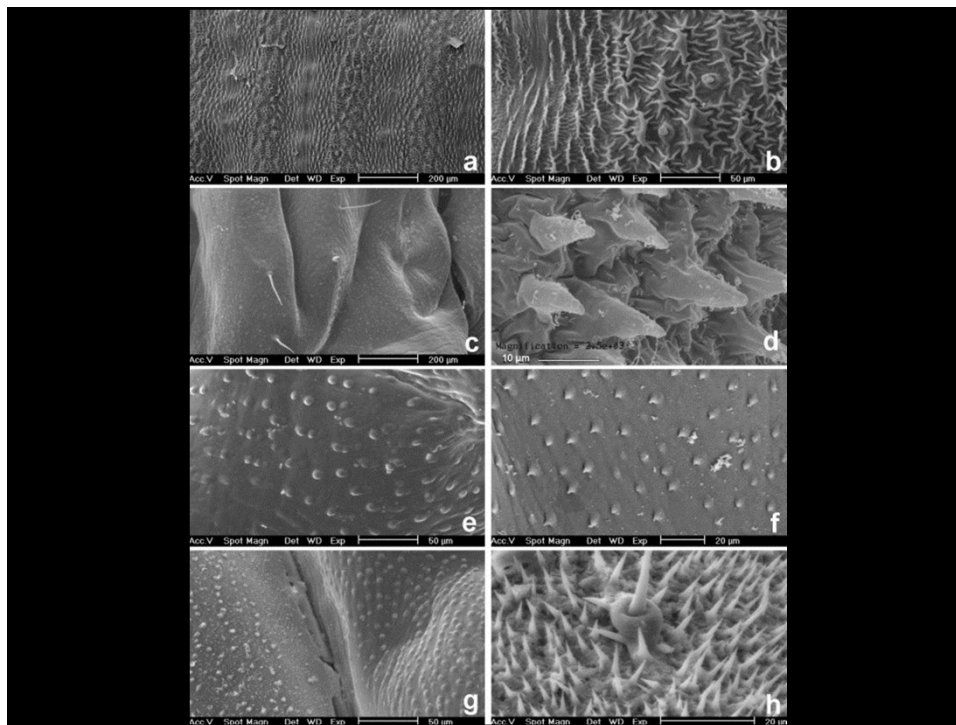
Insecta: Sternorrhyncha: Coccina (Schildläuse)



Arthropoda



α -Chitin. Chemische Struktur. Das Polymer setzt sich aus Ketten 1,4- β -glykosidisch verknüpfter N-Acetylglucosamin-Einheiten zusammen, bis zu 8'000 Monomere in den Makromolekülen, die die Chitin-Mikrofibrillen aufbauen.





Arthropoda (Gliederfüßer)

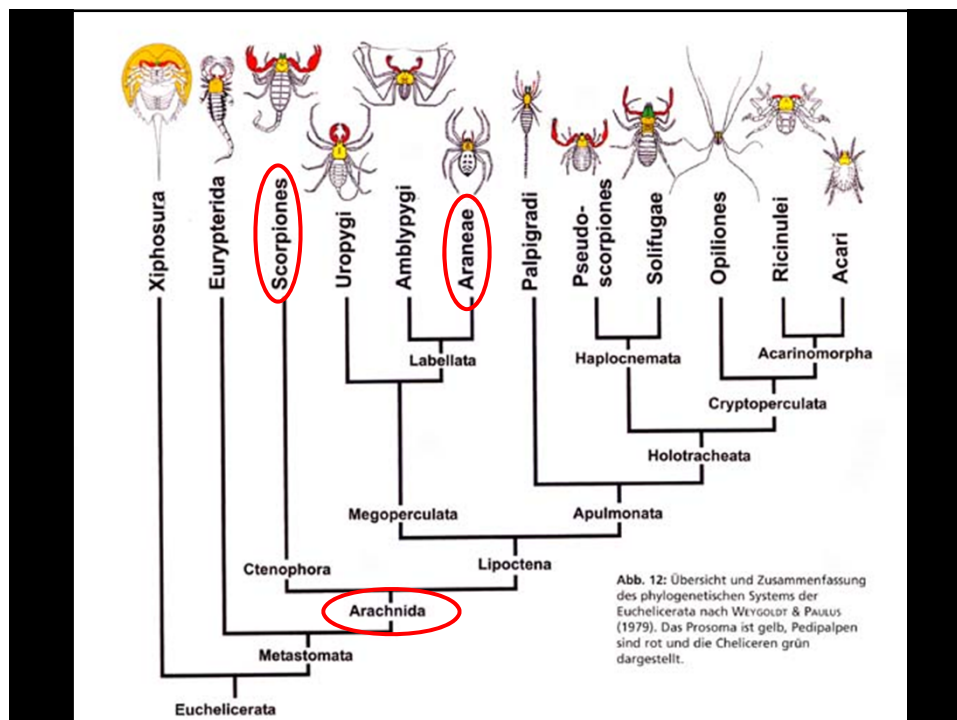
Arachnida (Spinnentiere) und Verwandte
Mandibulata

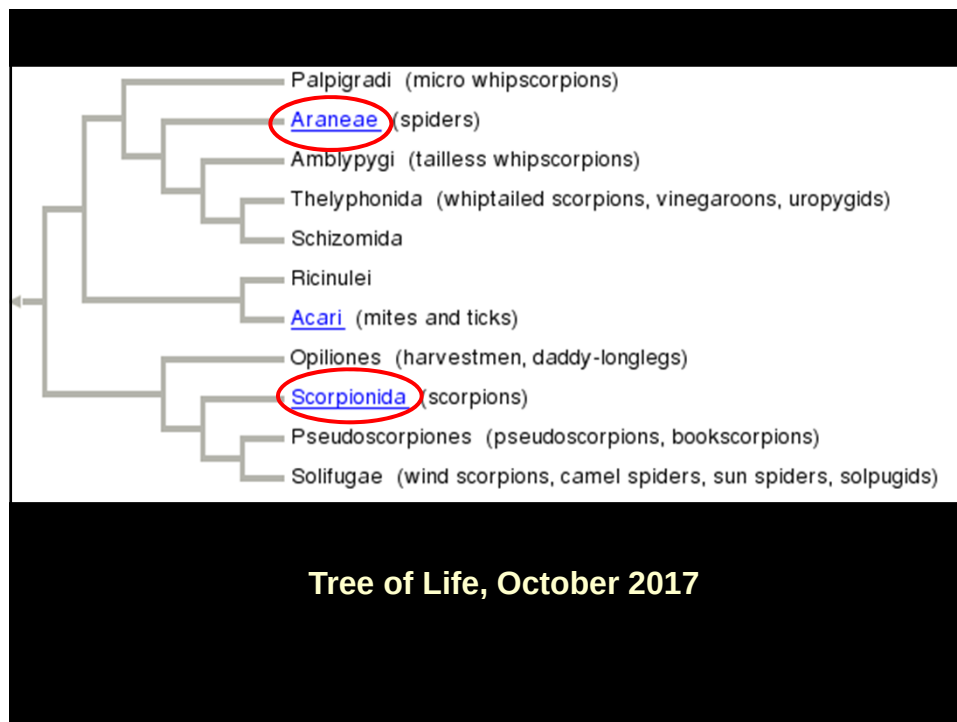
Myriapoda (Tausendfüßer)

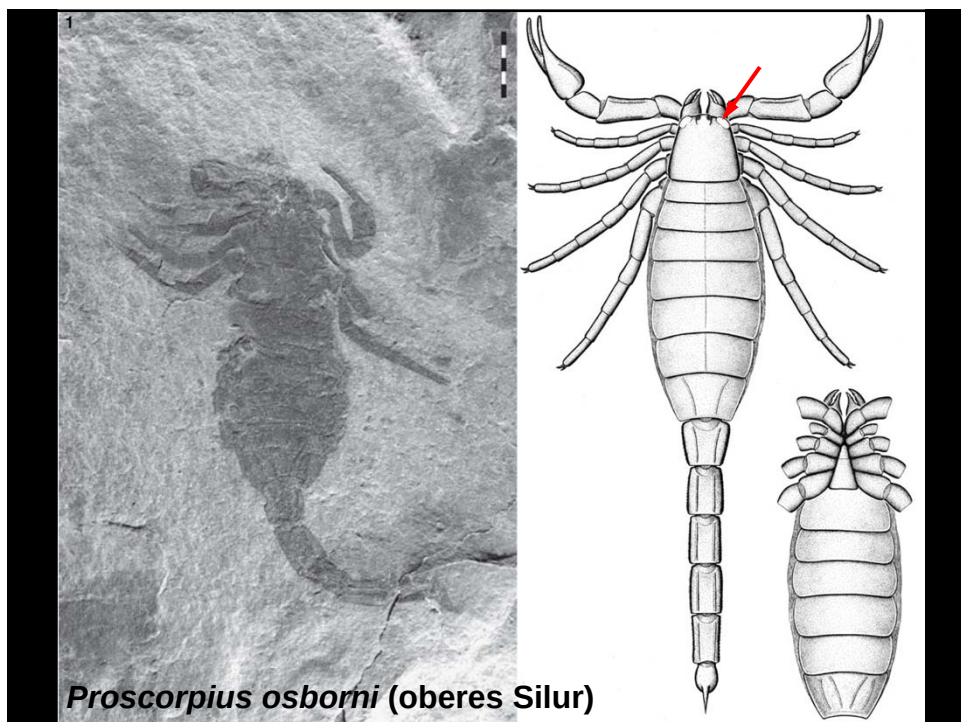
Pancrustacea

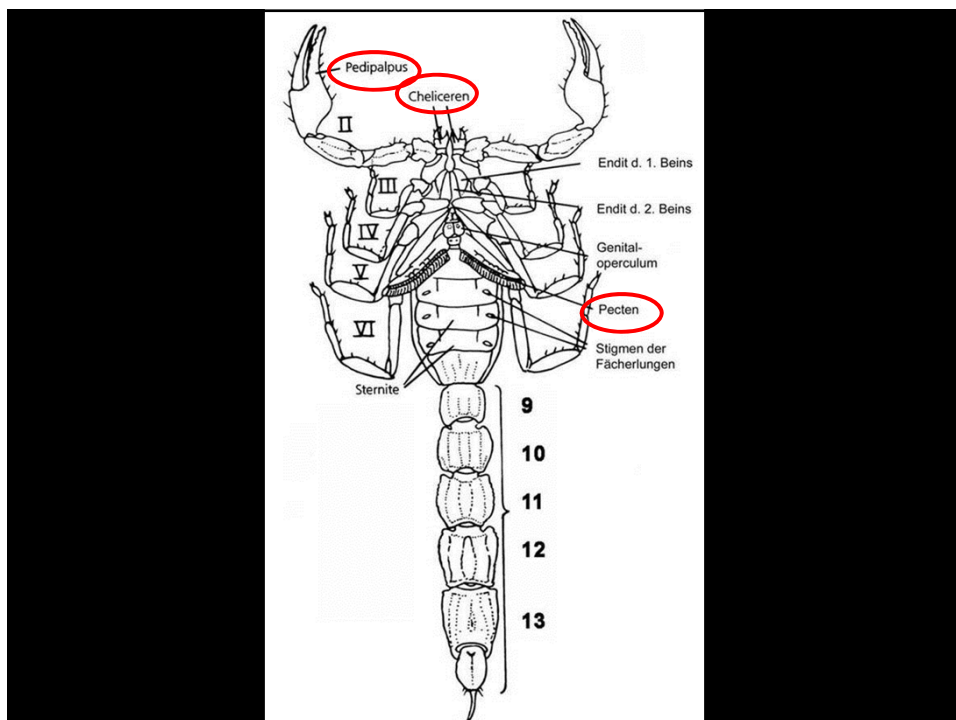
«Crustacea» (Krebse)

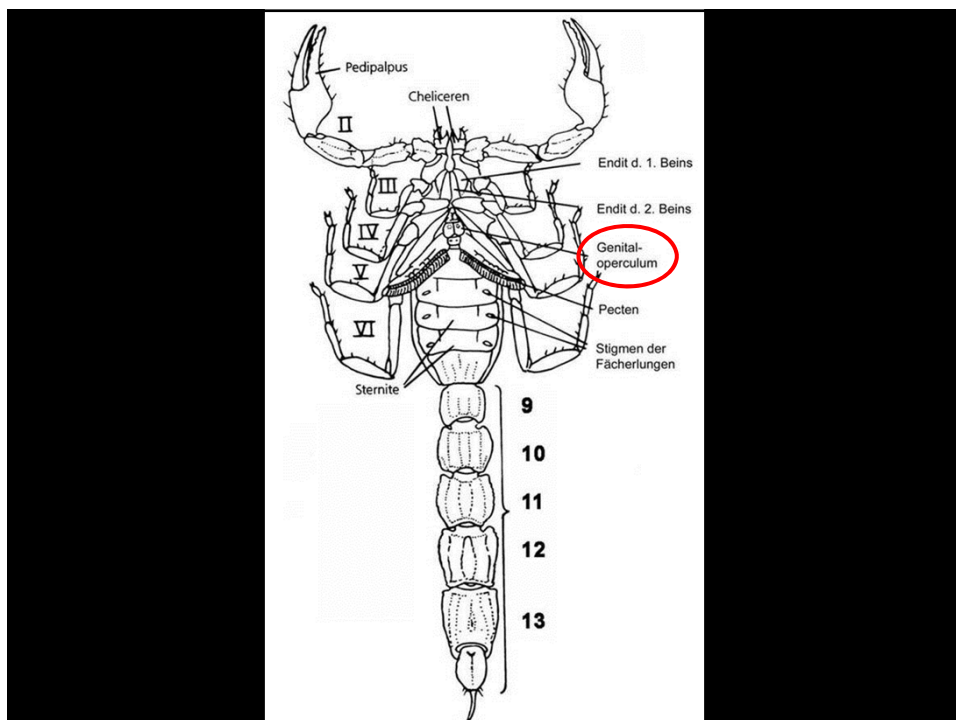
Insecta (Insekten)

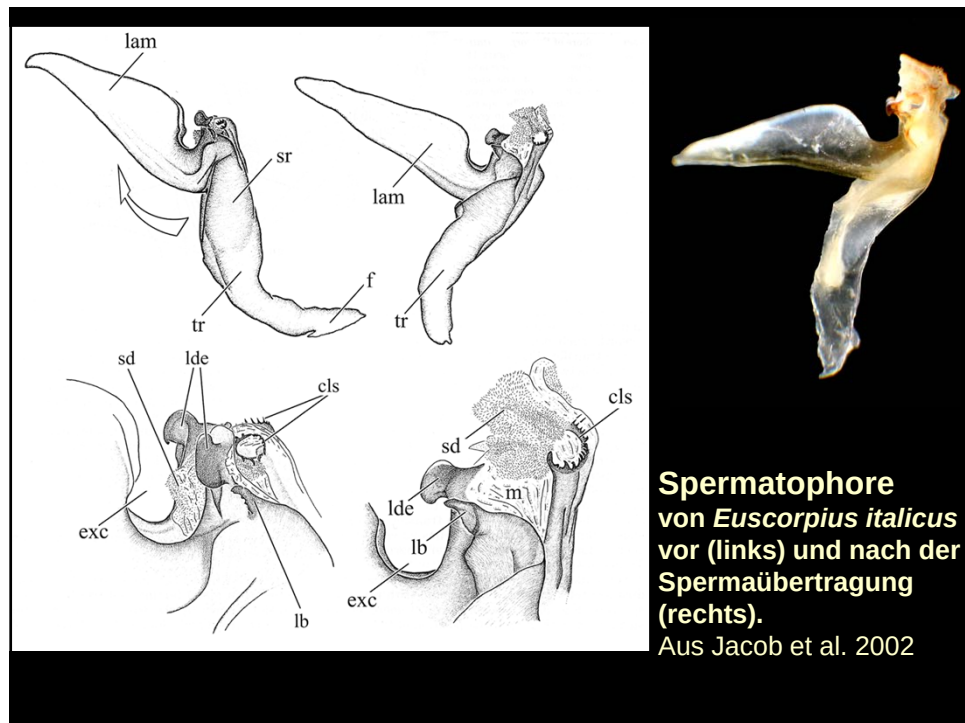


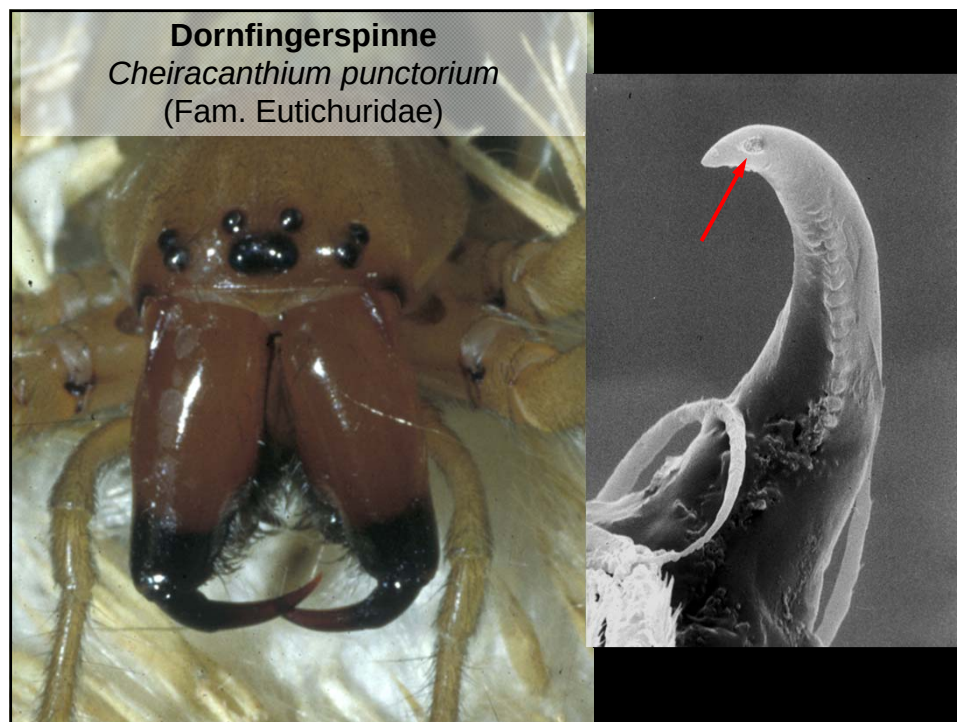
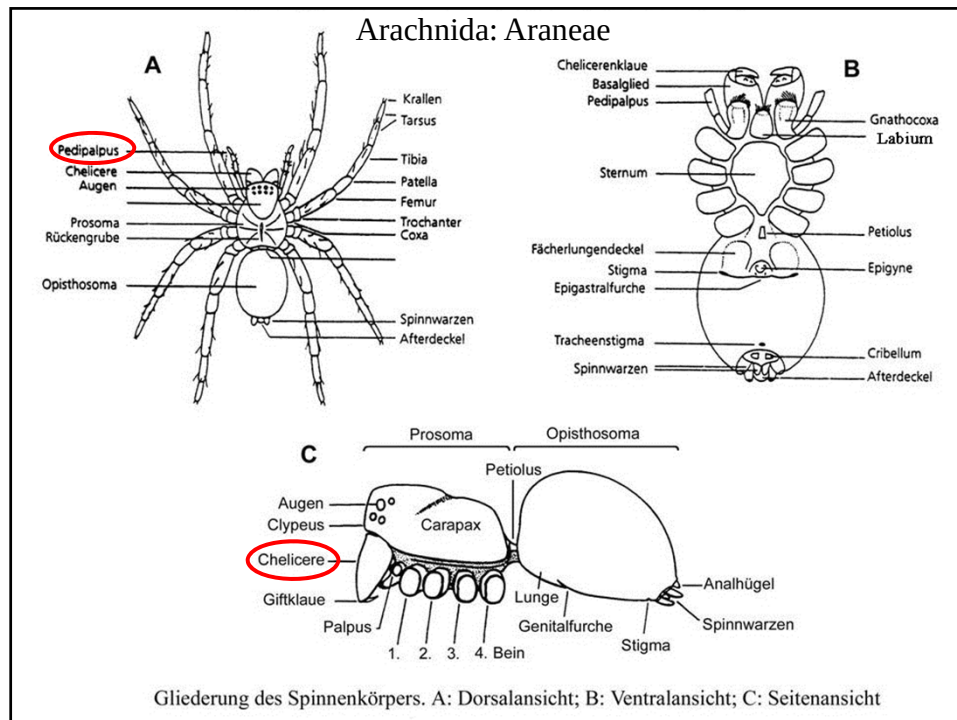


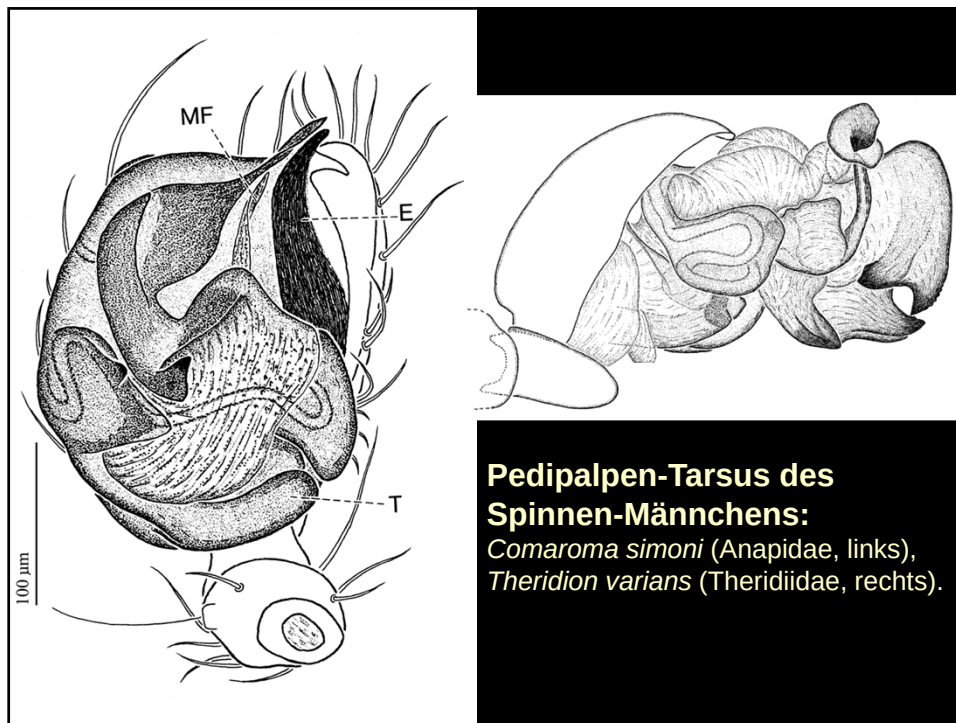




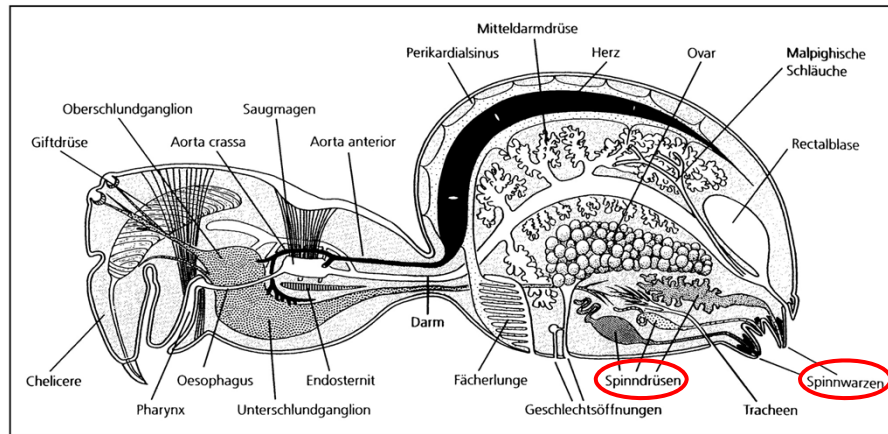








Arthropoda: Chelicerata: Arachnida: Araneae

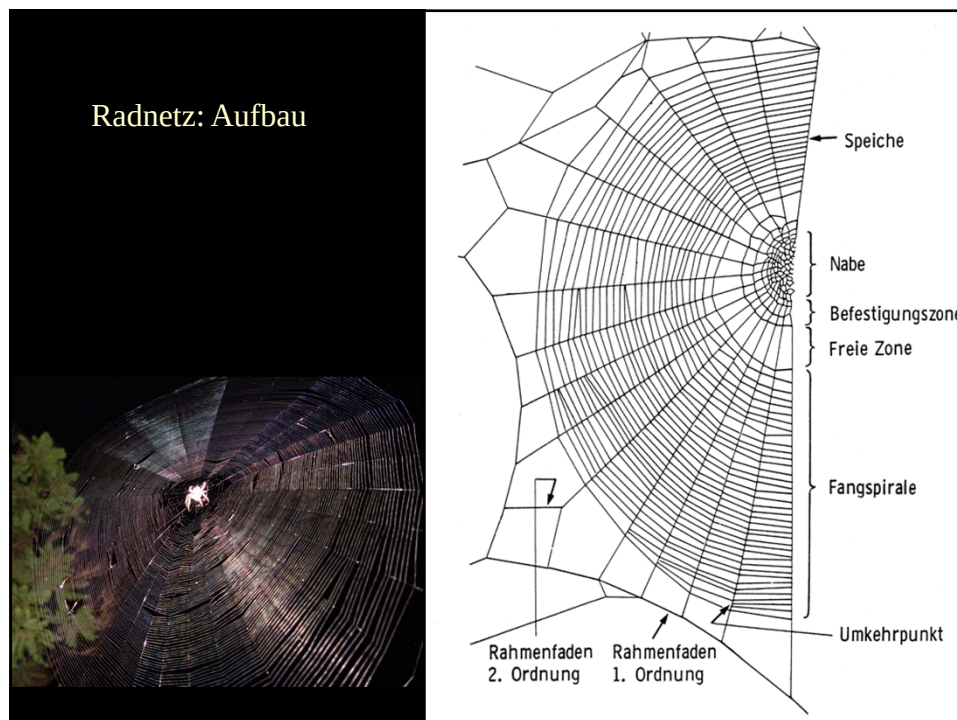
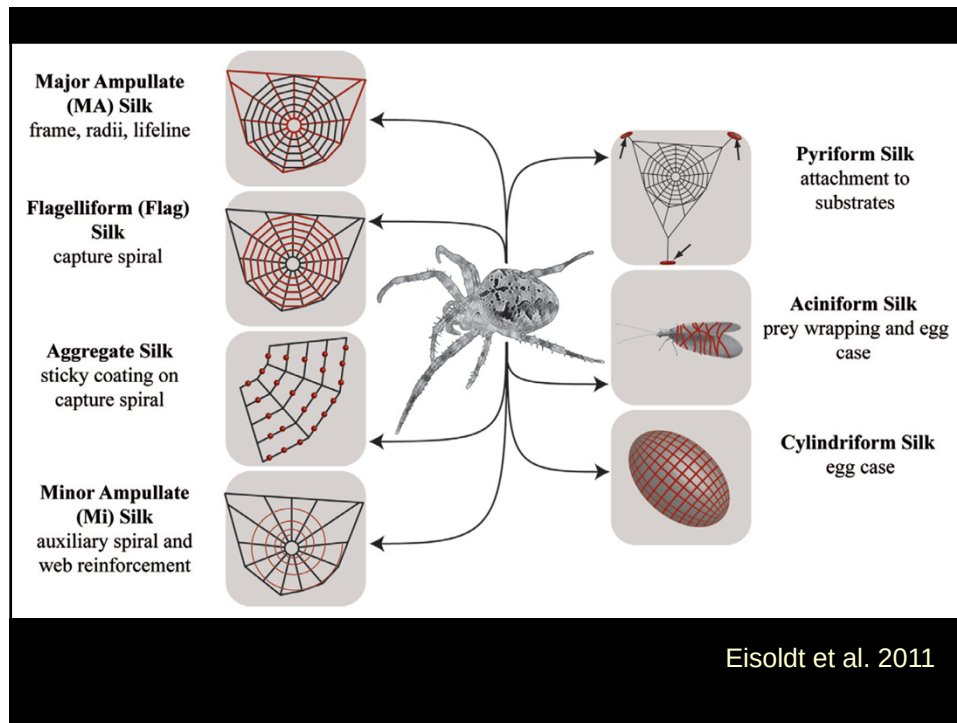


Organisationsschema einer Webspinne

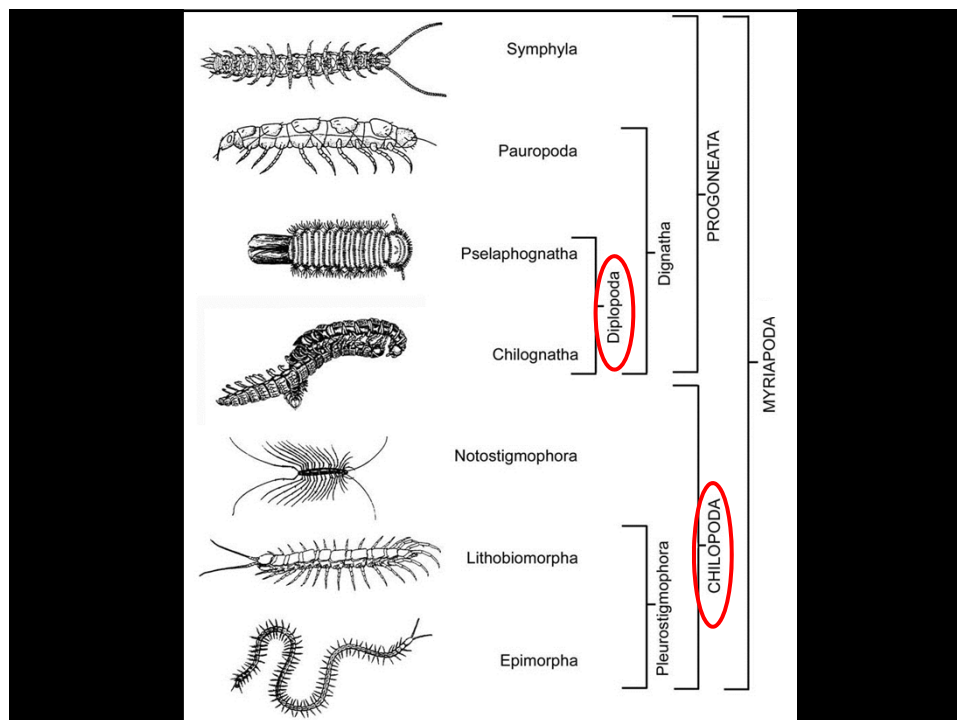


Vollrath 2010

Spinnspulen mit
Seidenfäden



Arthropoda (Gliederfüßer)
Arachnida (Spinnentiere) und Verwandte
Mandibulata
Myriapoda (Tausendfüßer)
Pancrustacea
«Crustacea» (Krebse)
Insecta (Insekten)



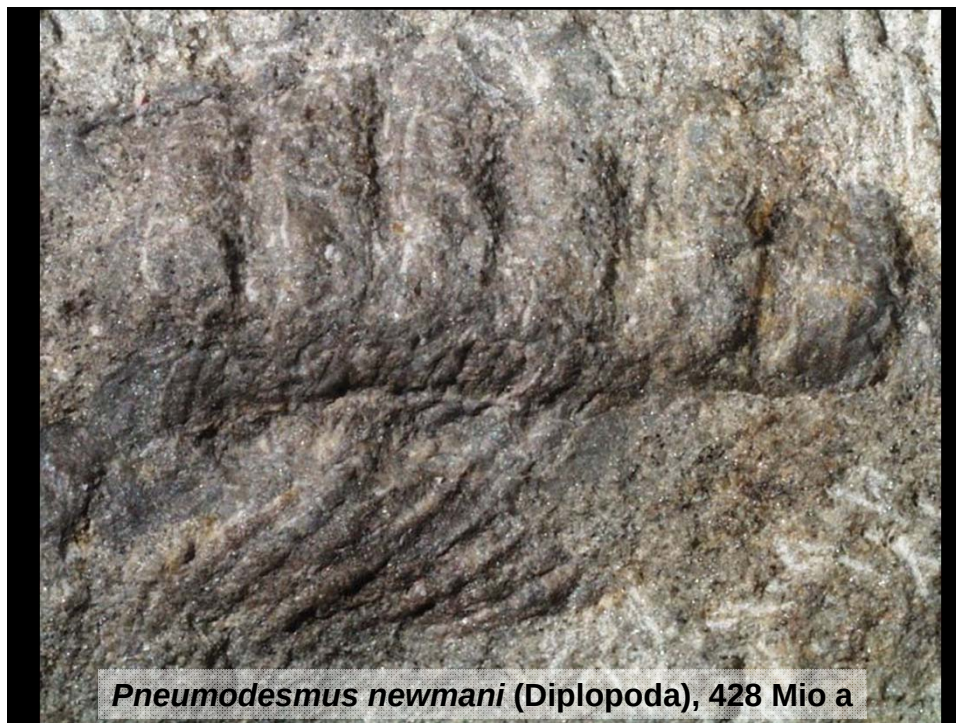


Doppelfüßer (Diplopoda): Julida. Chiang Mai, N-Thailand.

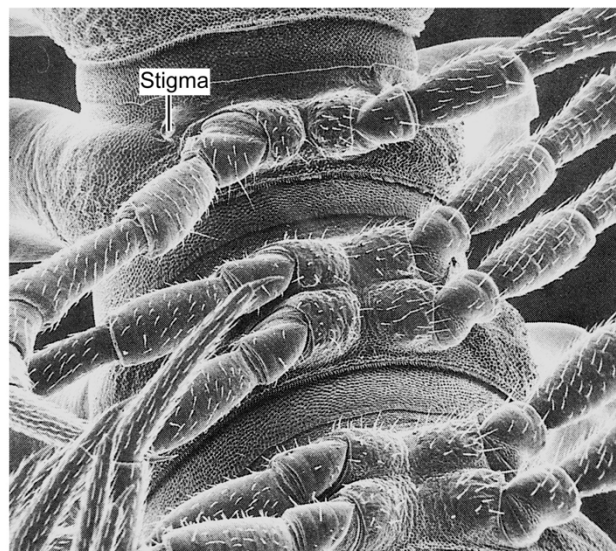


Hundertfüßer (Chilopoda): Scolopendra sp.



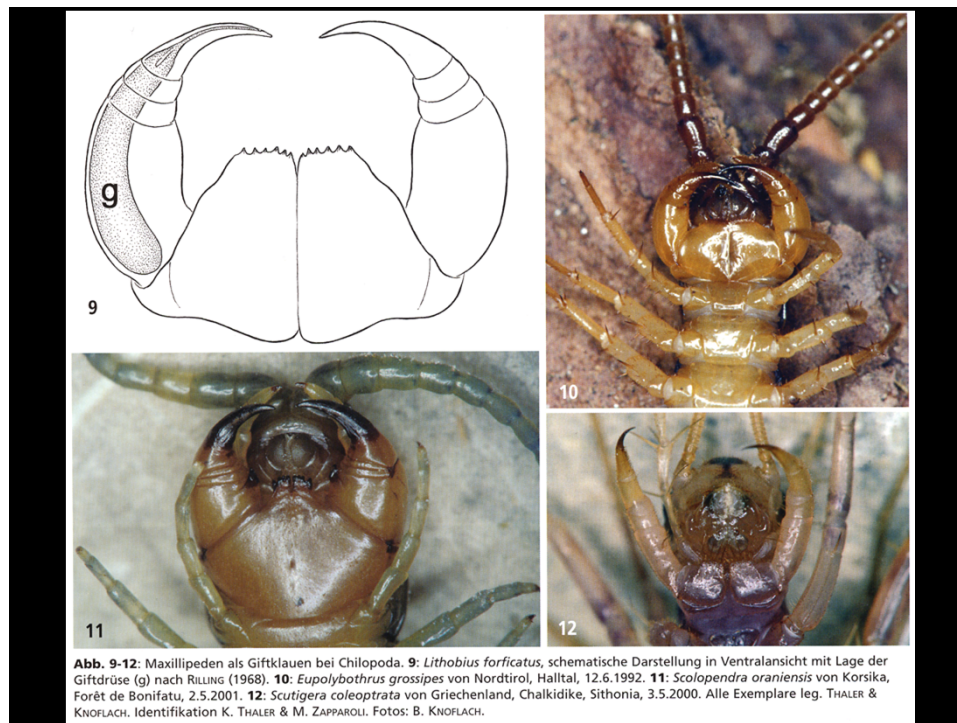


Arthropoda: "Myriapoda": Progoneata: Diplopoda



Polydesmus angustus (Diplopoda). Rumpfsegmente ventral, mit Ansätzen der 3.-7. Beinpaare und Stigmen.





Arthropoda (Gliederfüßer)

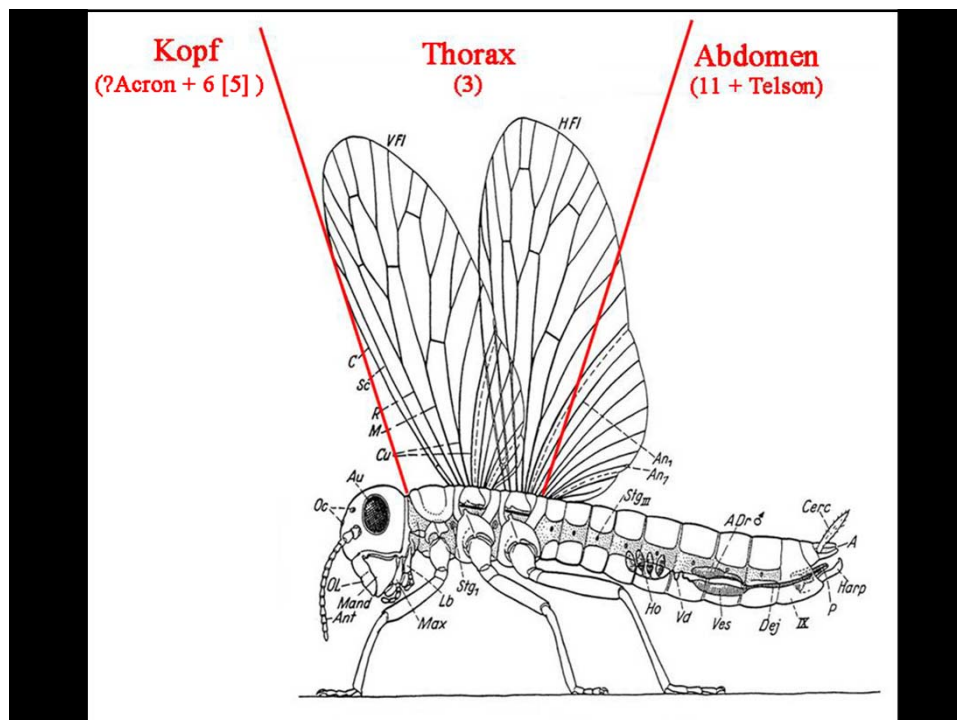
Arachnida (Spinnentiere) und Verwandte
Mandibulata

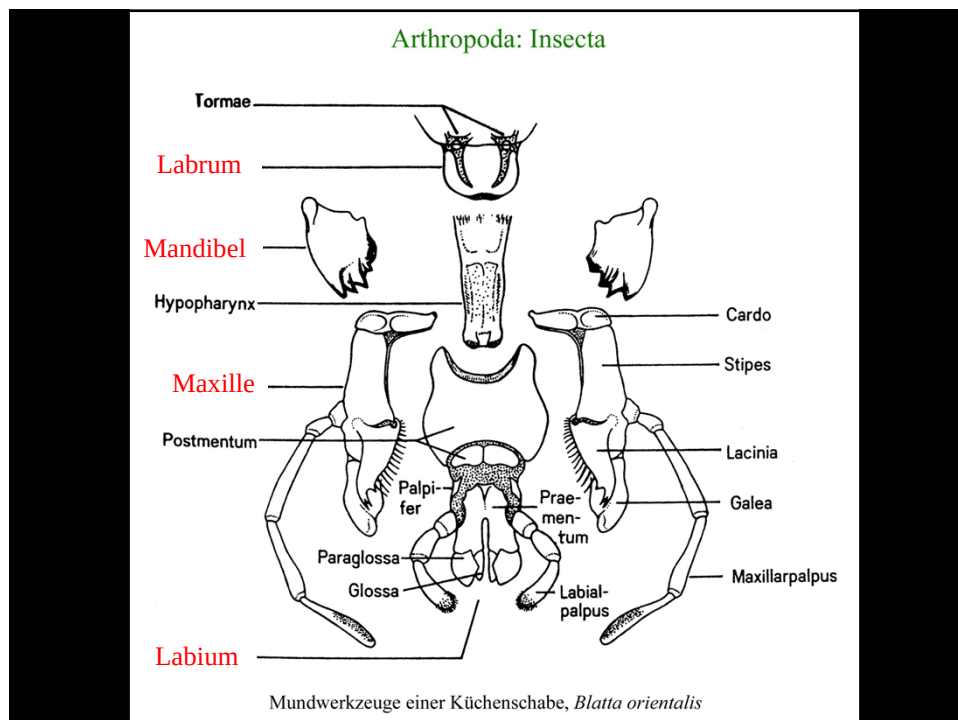
Myriapoda (Tausendfüßer)

Pancrustacea

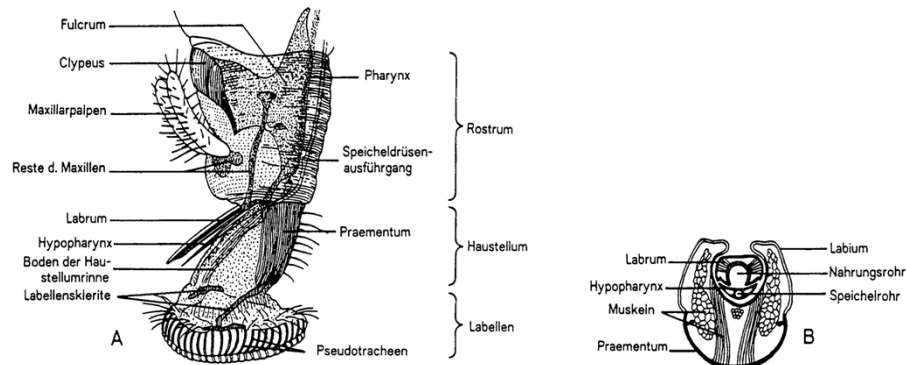
«Crustacea» (Krebse)

Insecta (Insekten)



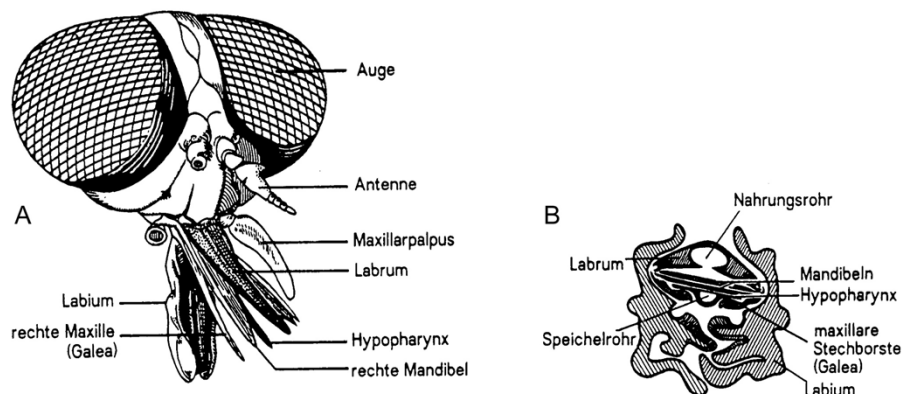


Arthropoda: Insecta: Pterygota: Holometabola



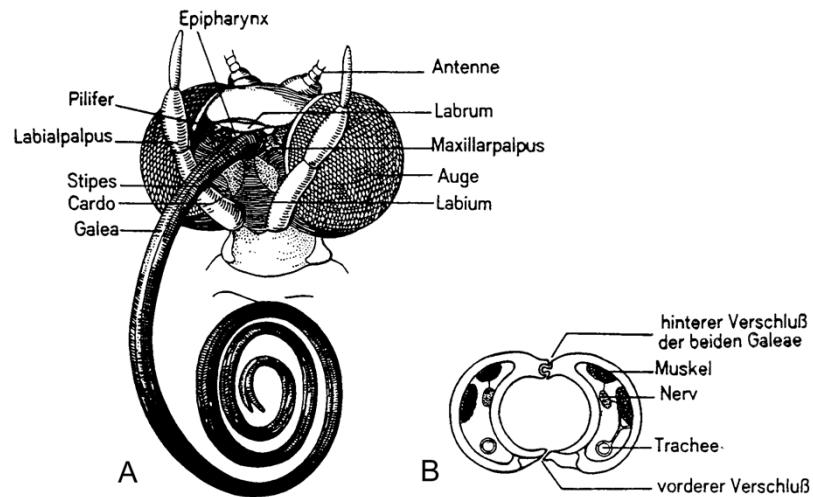
Mundwerkzeuge einer Stubenfliege, *Musca domestica*. A: Ansicht von der linken Seite; B: Querschnitt durch das Haustellum

Arthropoda: Insecta: Pterygota: Holometabola

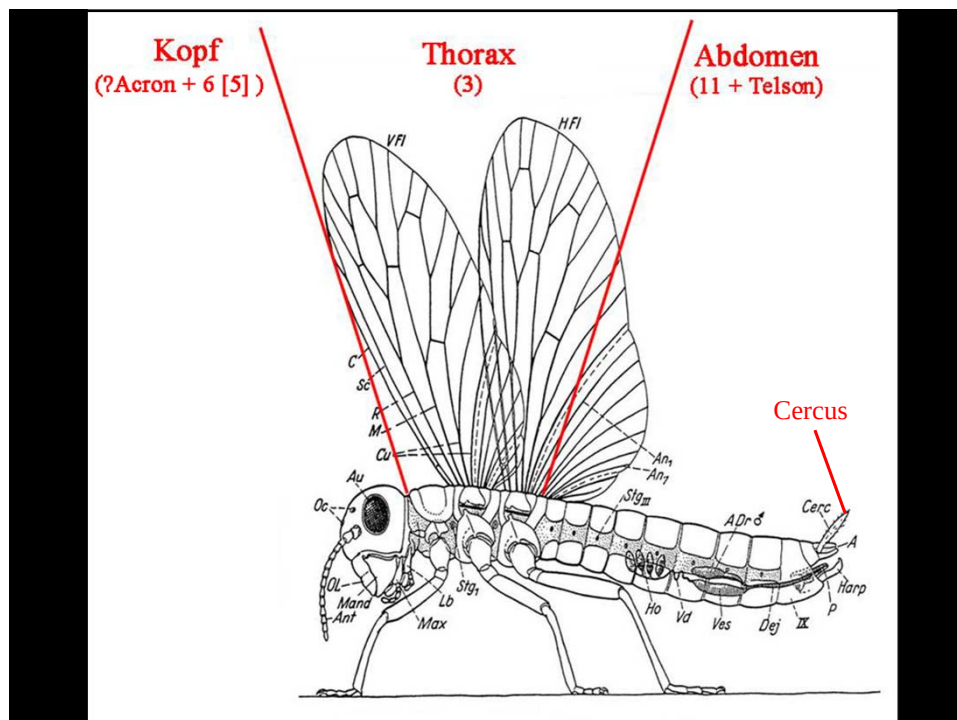


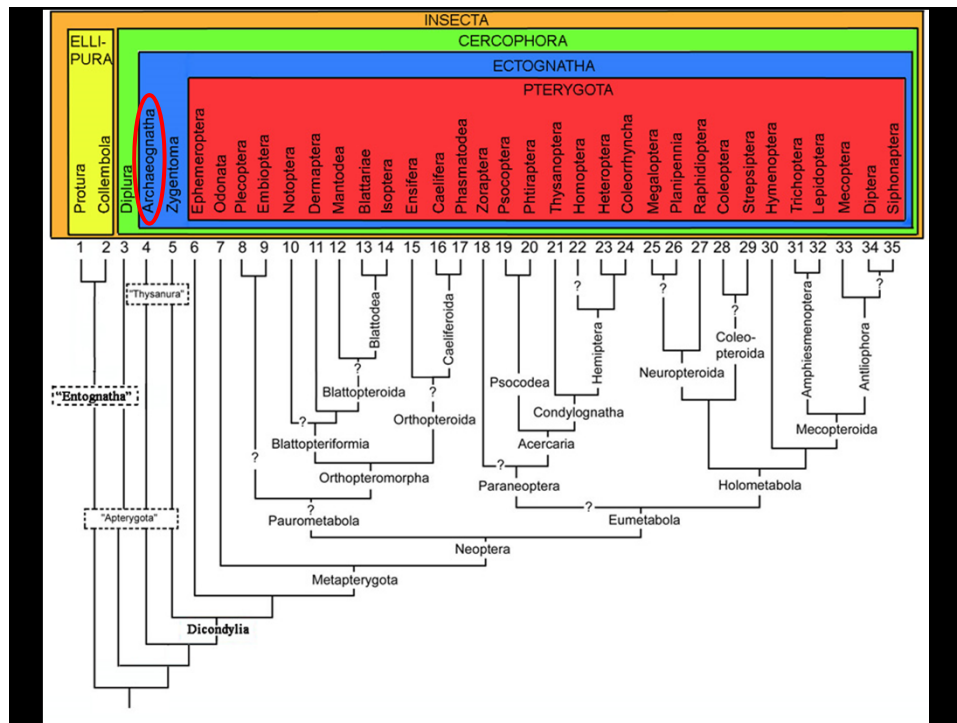
Kopf und Mundwerkzeuge einer weiblichen Bremse, *Tabanus spec.* A: Gesamtansicht; B: Querschnitt durch den Stechrüssel

Arthropoda: Insecta: Pterygota: Holometabola

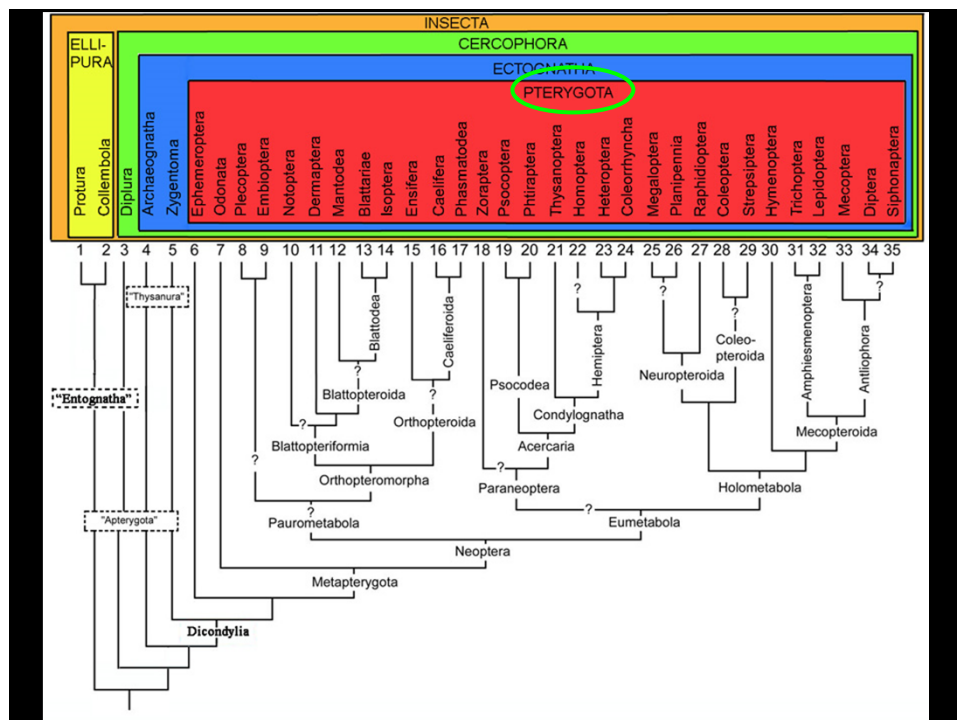
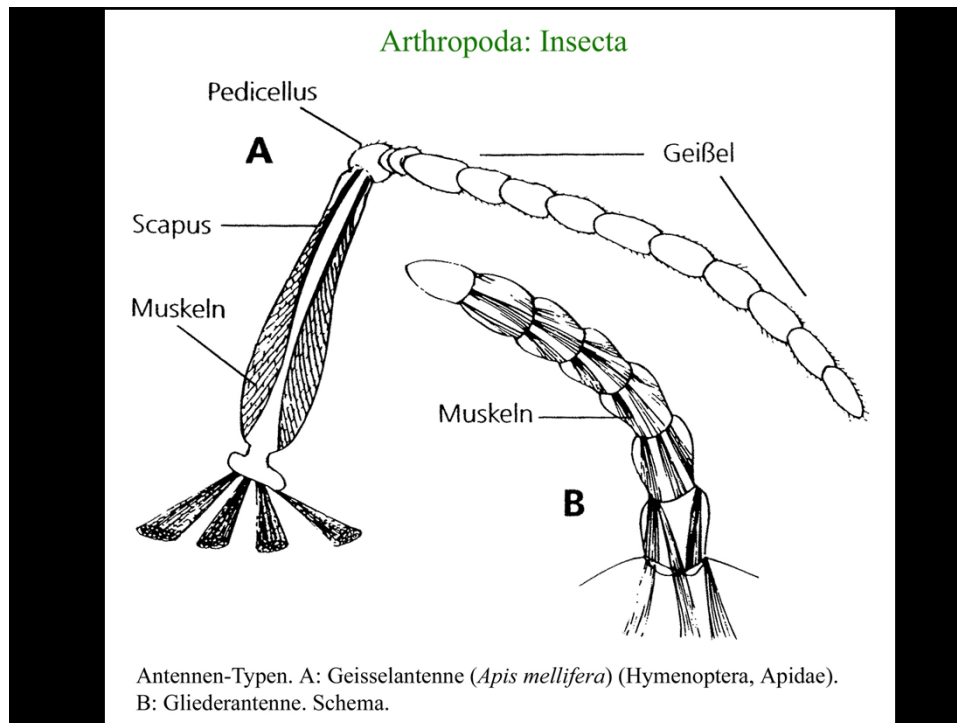


Kopf und Mundwerkzeuge eines Schmetterlings. A: Totalansicht; B: Querschnitt durch den Saugrüssel





Felsenspringer (Archaeognatha)



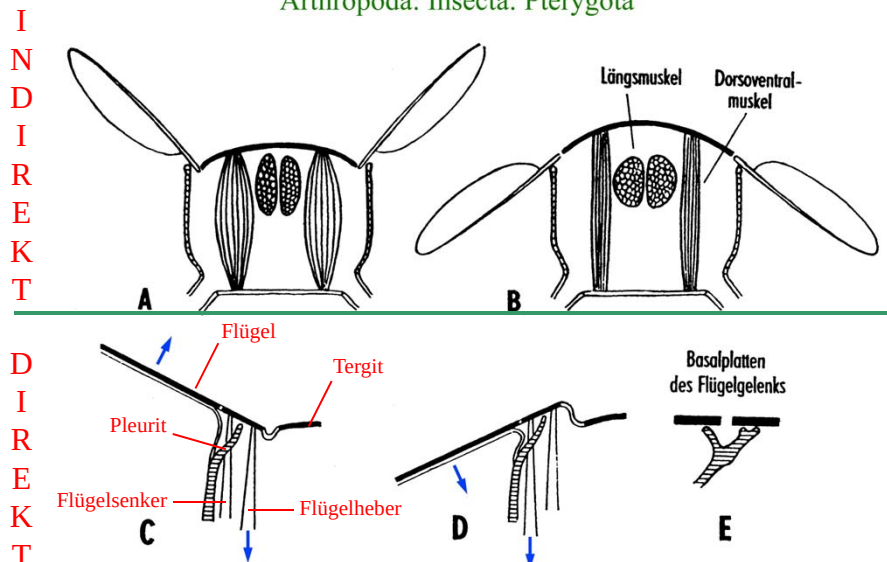
Arthropoda: Insecta: Dicondylia: Pterygota: **Palaeodictyoptera**



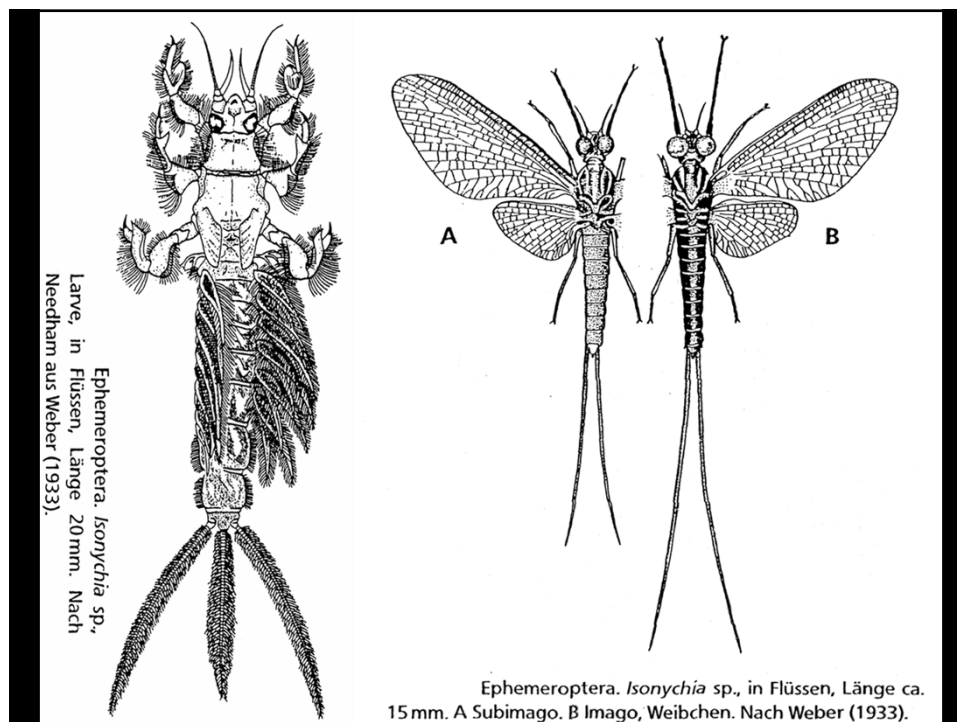
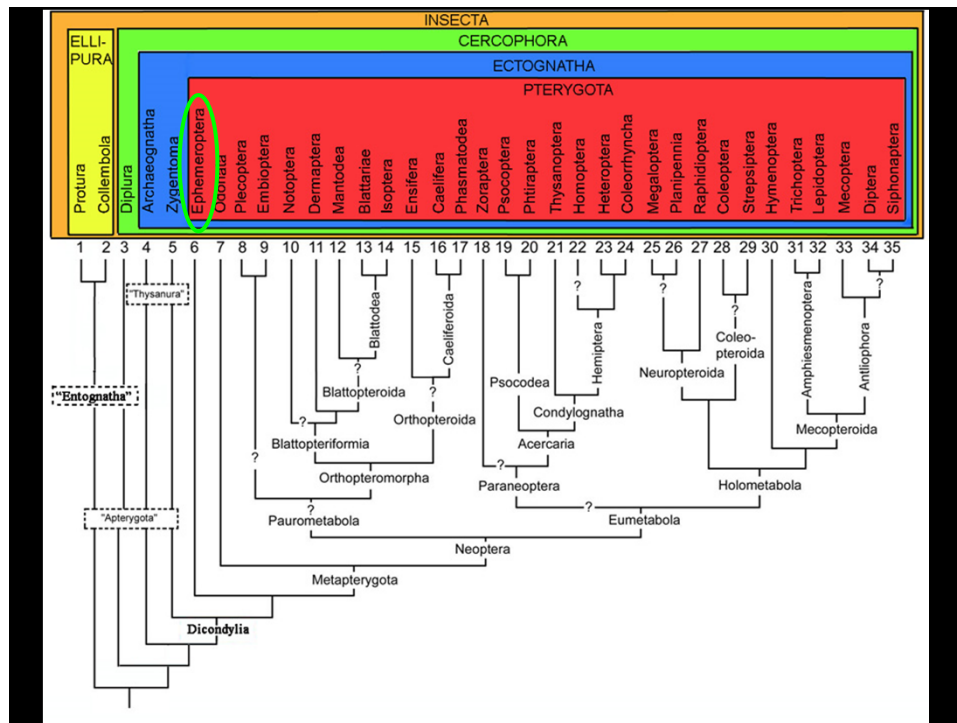
Figure 18.9 Ancestral winged insects. Reconstruction by A.G. Ponomarenko.

†*Stenodictya* sp. (Palaeodictyoptera). Mittleres Oberkarbon.
Rekonstruktion. Körperlänge ca. 80 mm.

Arthropoda: Insecta: Pterygota



Flügelmuskulatur und Flügelbewegung der Pterygota. A: Hebung der Flügel durch Kontraktion der Dorsoventralmuskeln; B: Senkung der Flügel durch Kontraktion der Längsmuskeln; C und D: Dieselben Vorgänge durch Kontraktion antagonistisch wirkender direkter Flügelmuskeln bei den Odonata; E: Gabelung des pleuralen Flügelgelenkkopfes bei den Odonata.



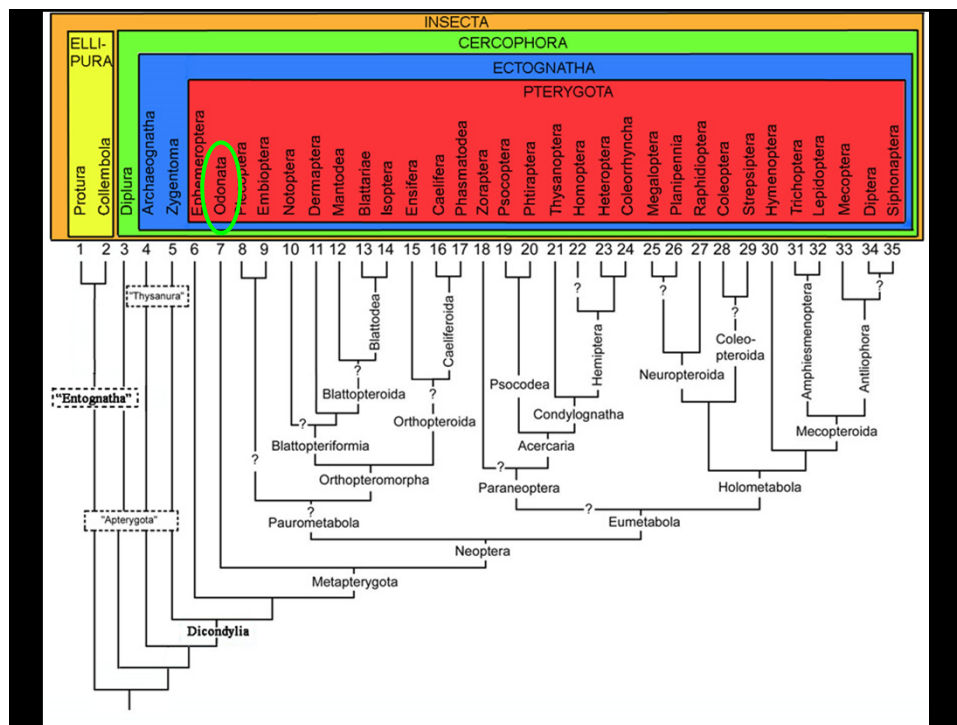


Ephemeroptera (Eintagsfliegen): Larve, gewölbte Form



Ephemeroptera (Eintagsfliegen): Larve, flache Form



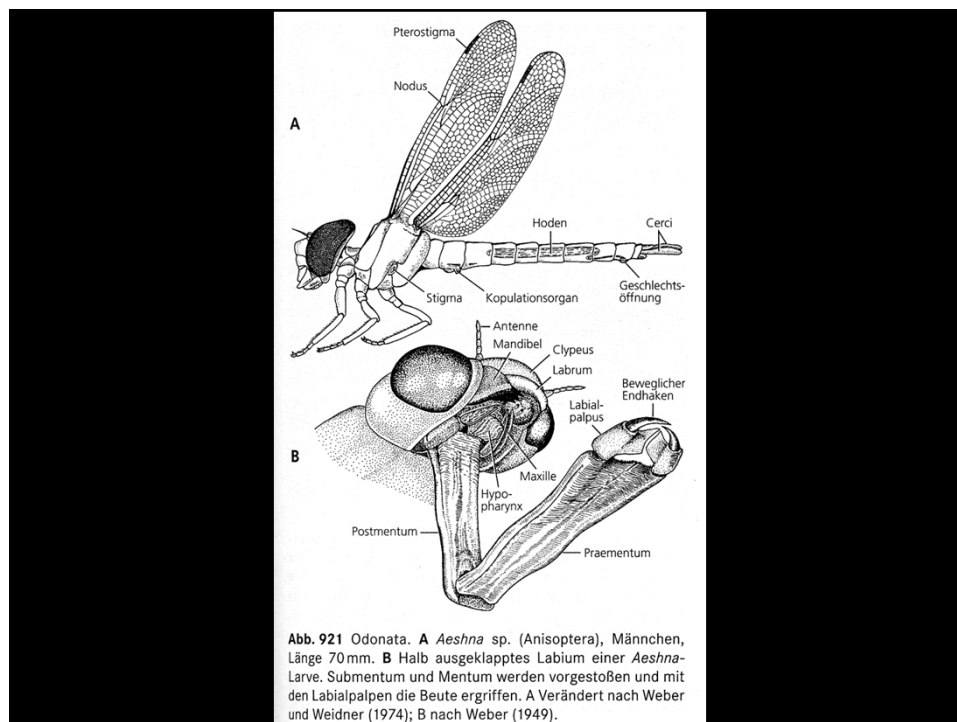


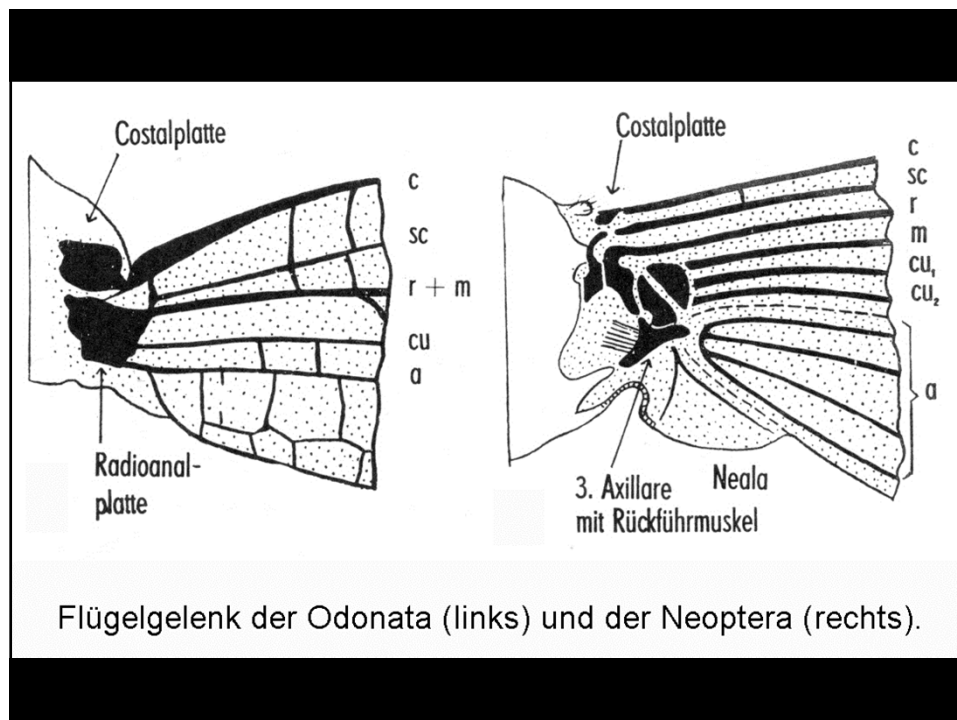
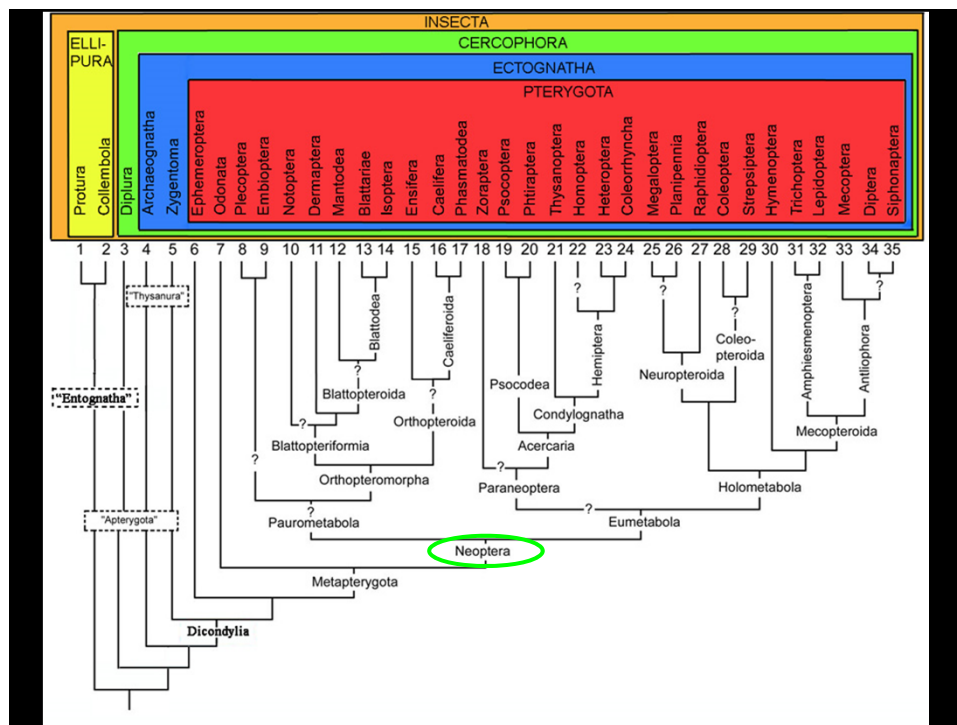
Insecta: Pterygota: Odonata:

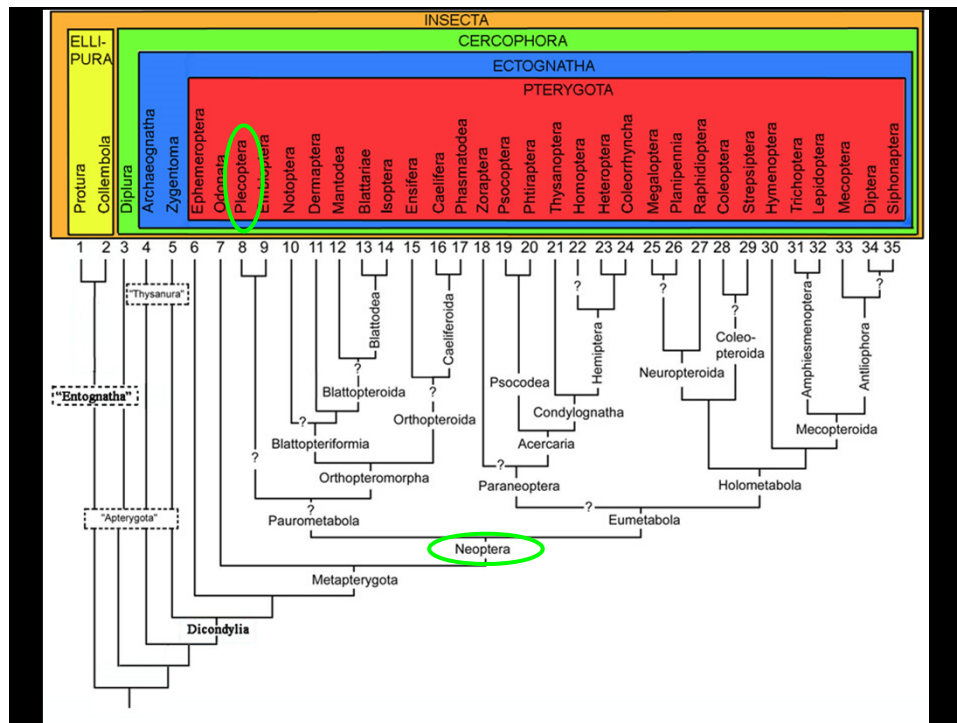
Sympetrum danae
(Schwarze Heidelibelle),

rechts Weibchen, unten Larve.





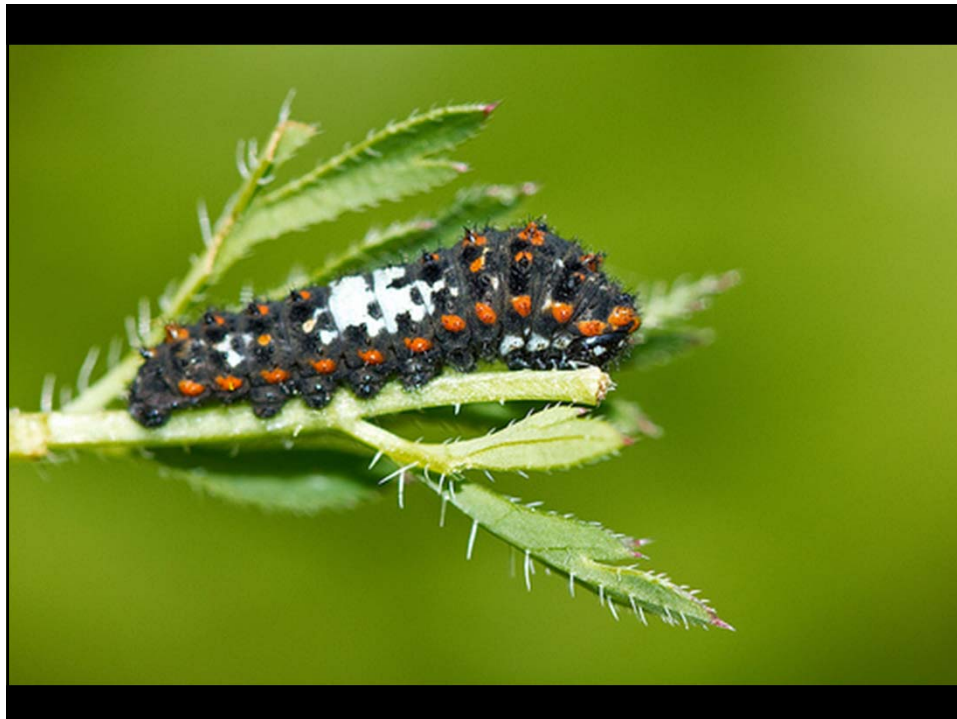


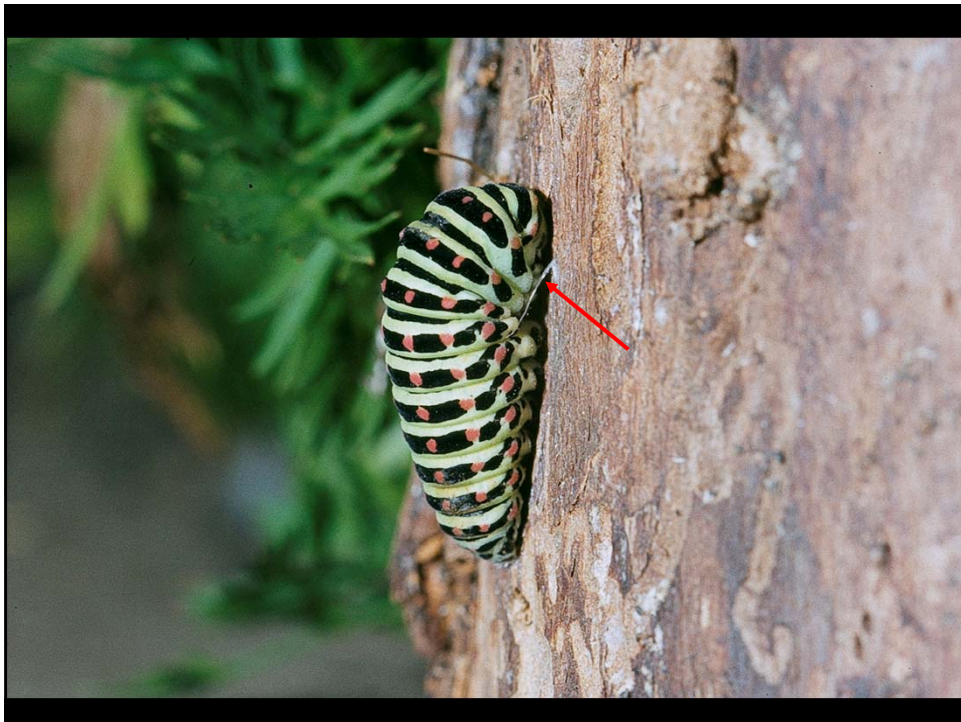


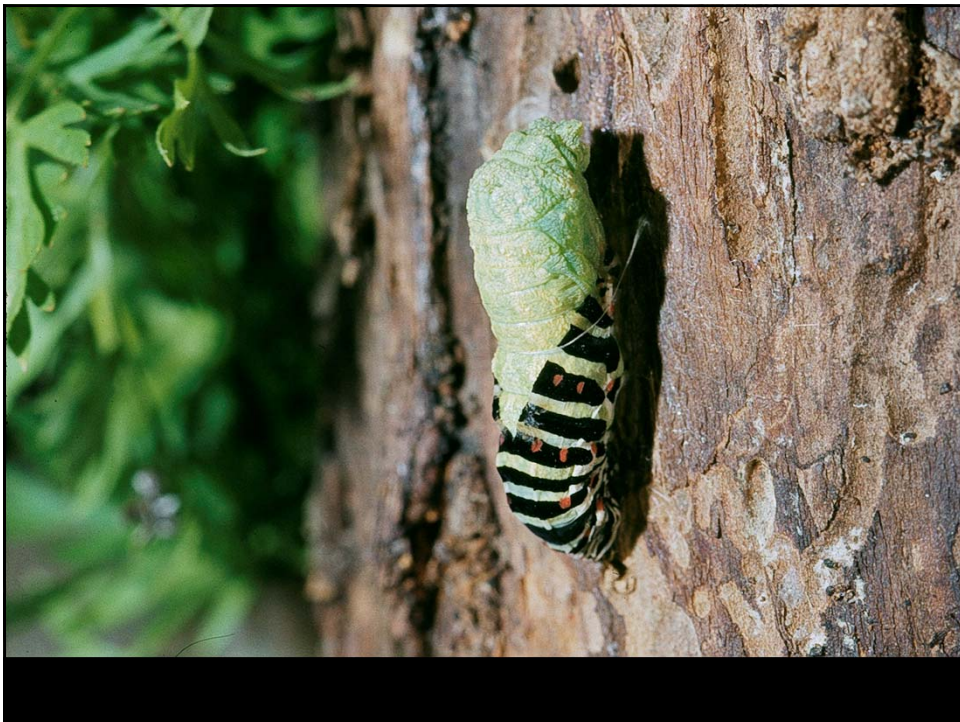
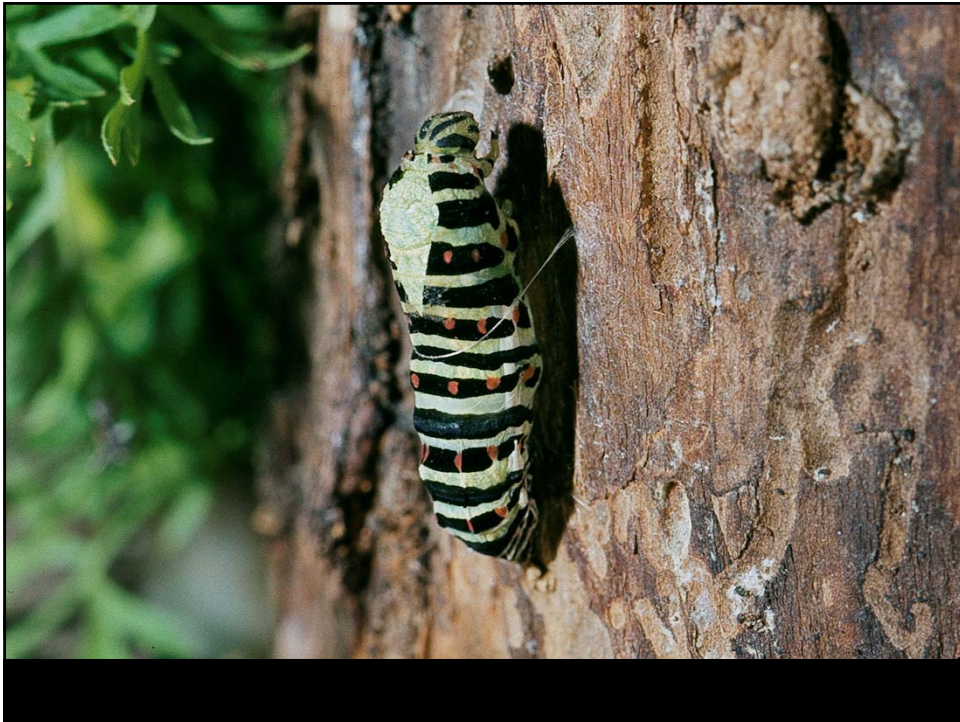
Insecta: Pterygota: Neoptera:
Plecoptera (Steinfliegen)



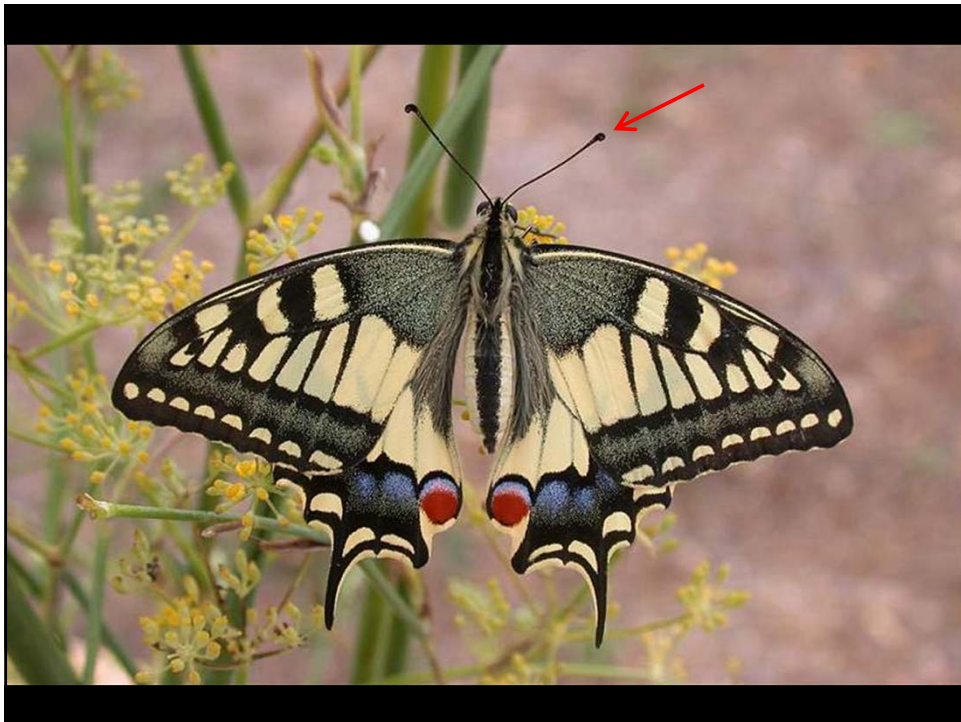


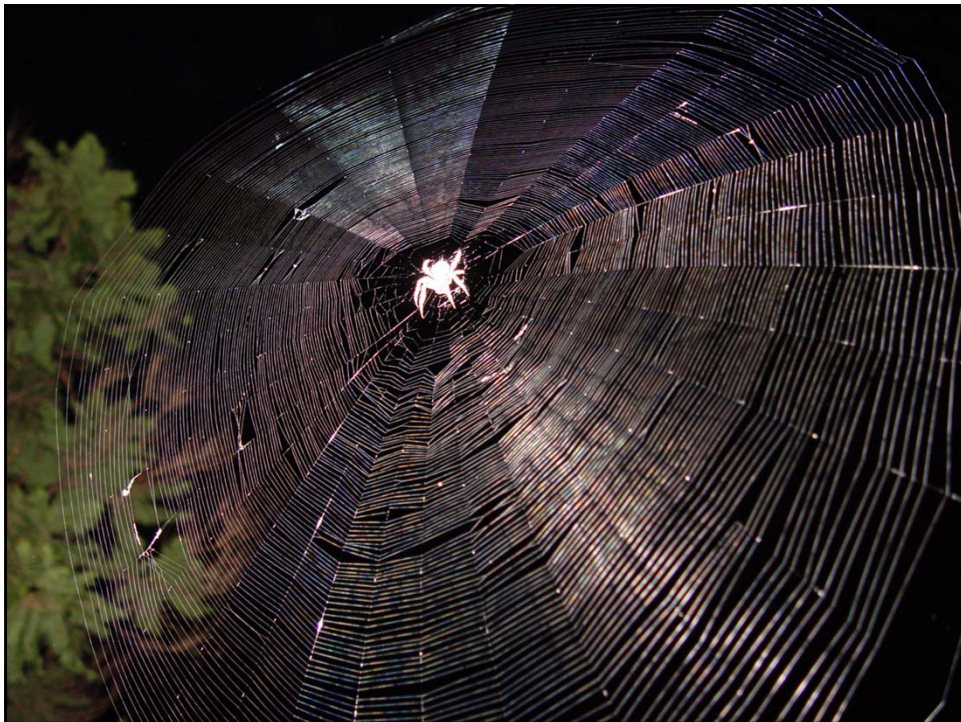


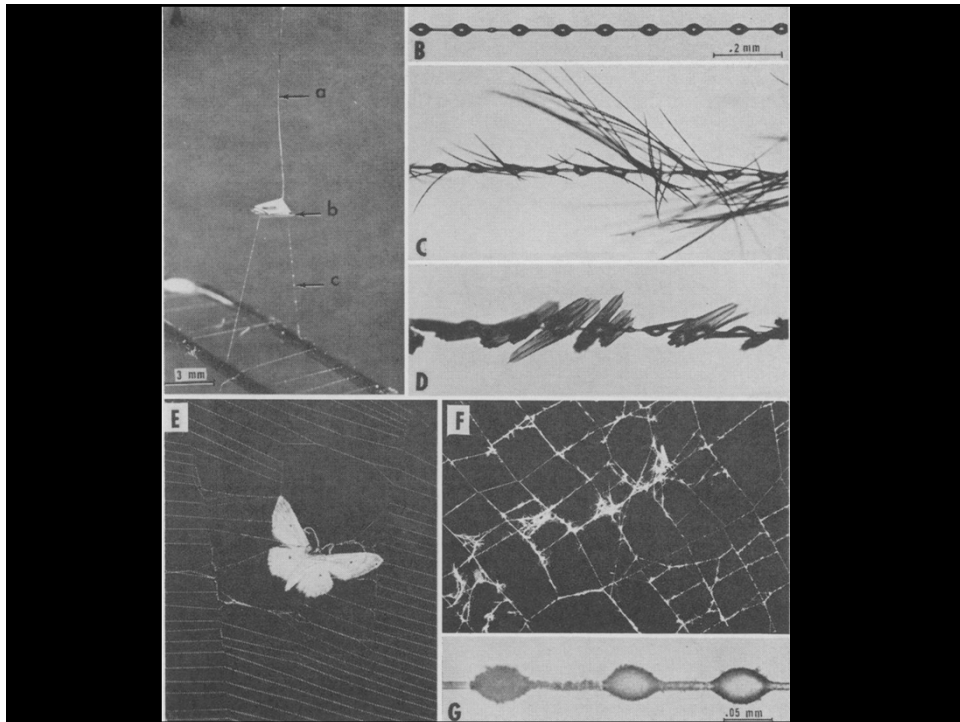








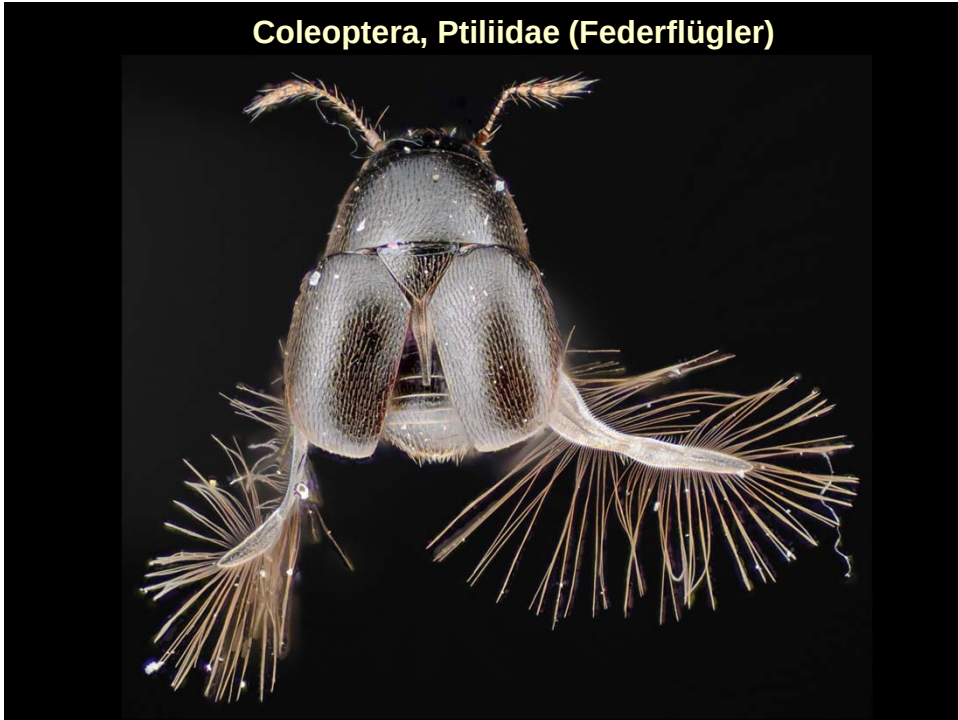




Coleoptera (Käfer):

Otiorhynchus grischunensis
Germann, 2010

Coleoptera, Ptiliidae (Federflügler)



Coleoptera, Cerambycidae (Bockkäfer): *Titanus giganteus*





