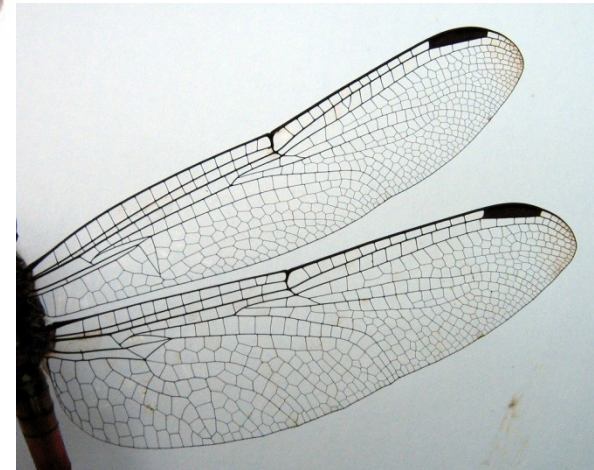
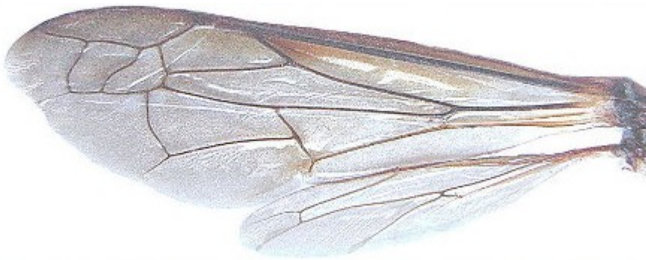


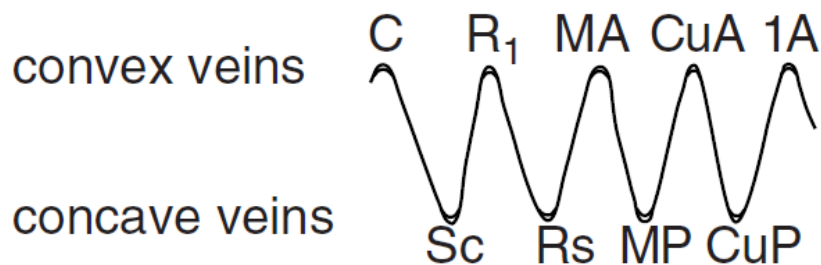
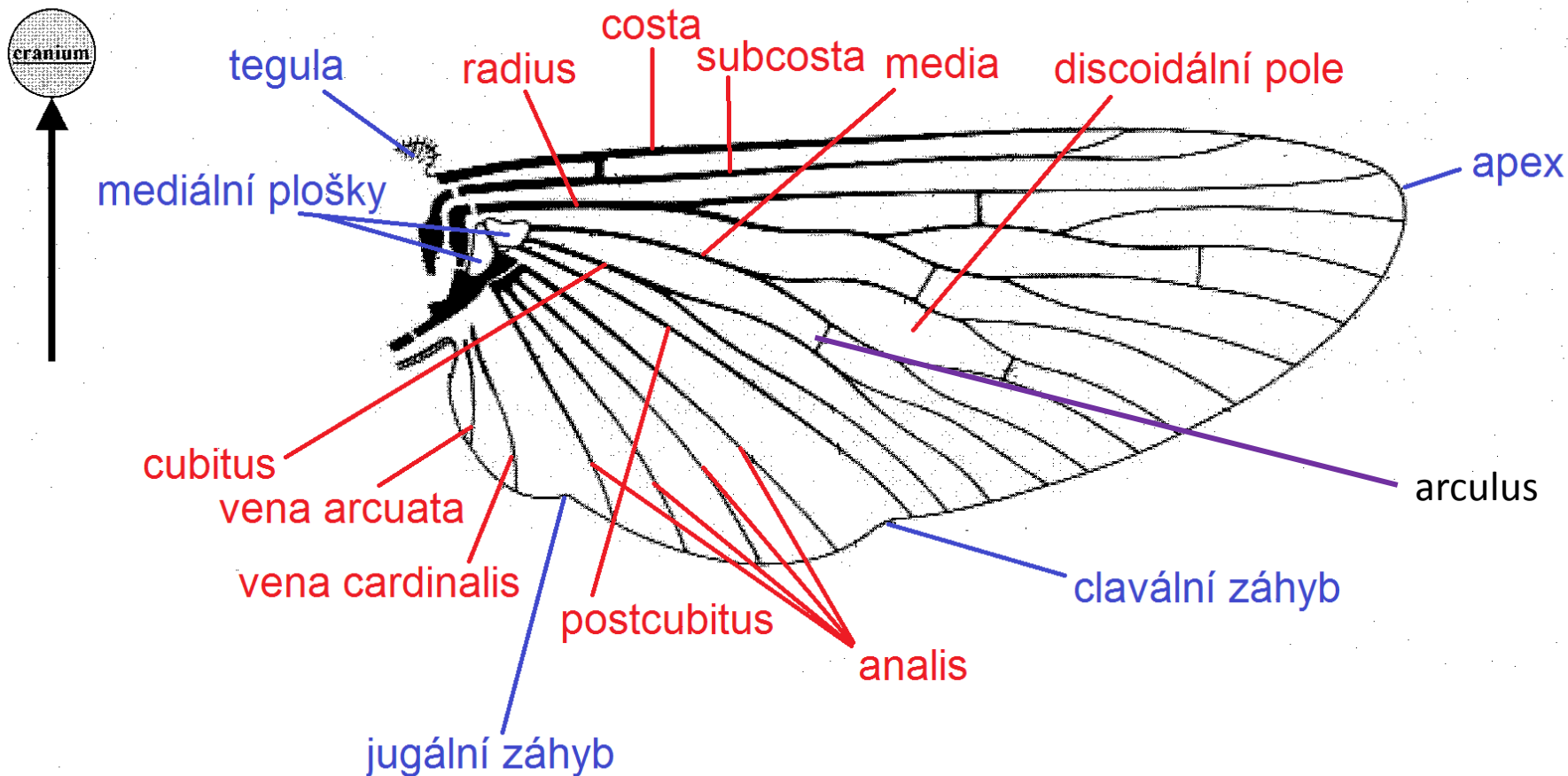
Základy entomologie

cvičení 4

Křídlo

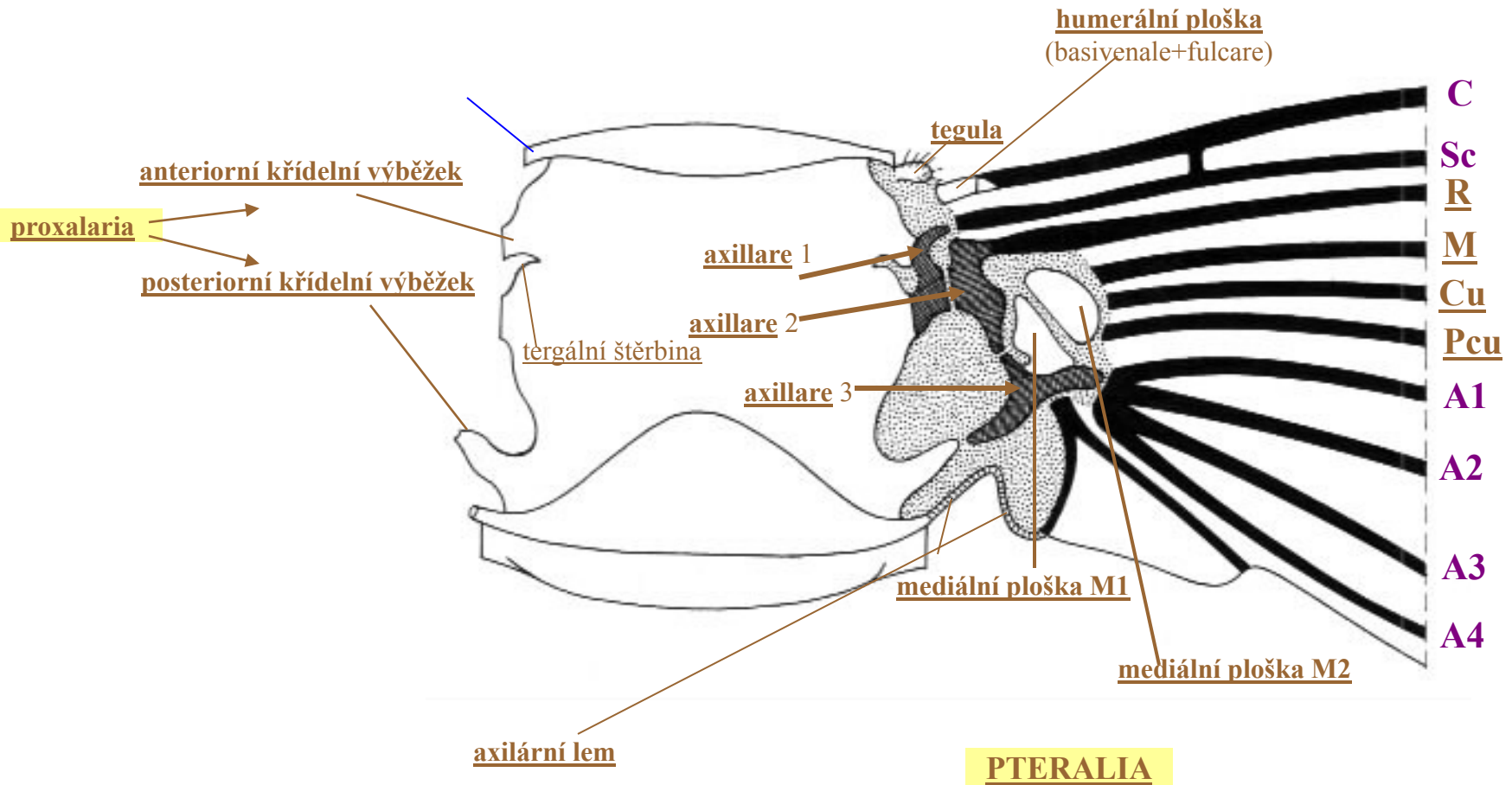


Žilnatina křídla – obecné schéma

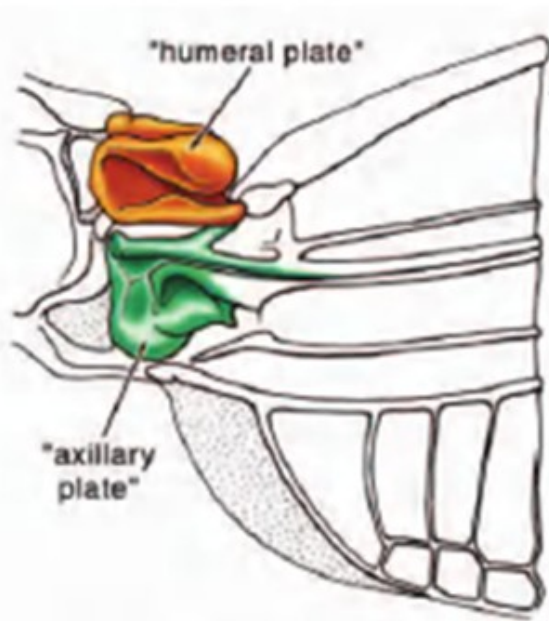


Pterothorax a zakloubení křídla - dorzální pohled na mesothorax

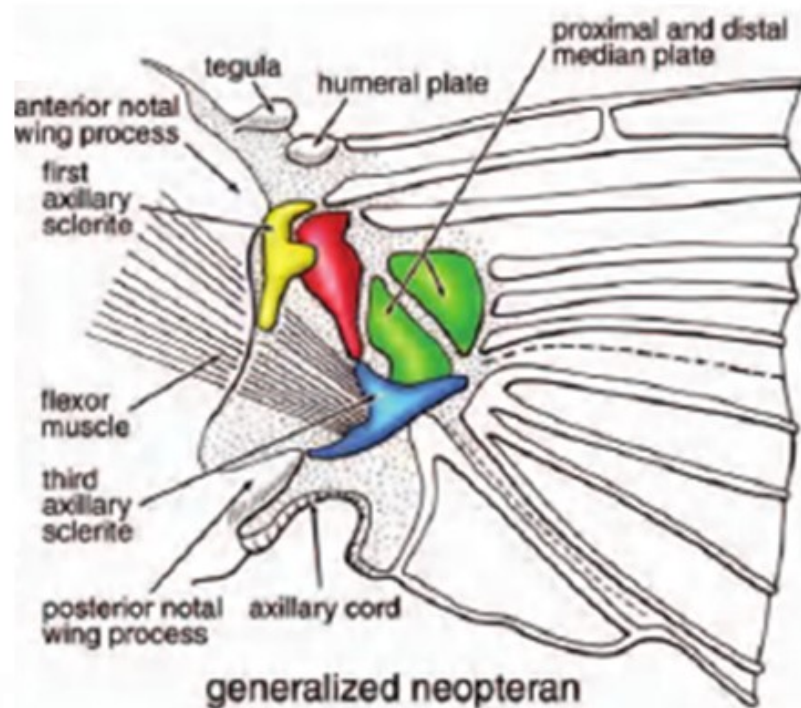
cranium



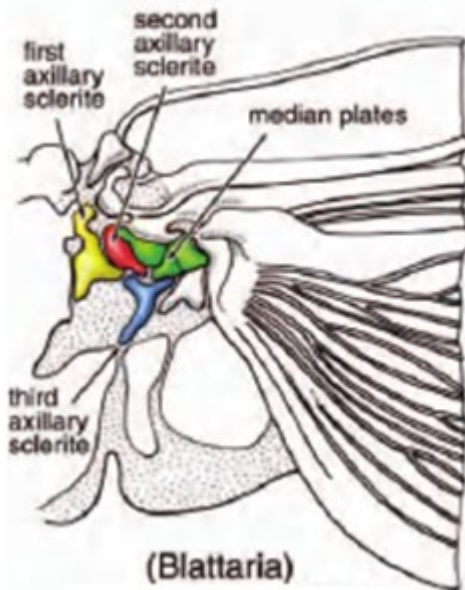
Struktura báze křídla: bazální sklerity (pteralia)



paleopteran (Odonata)

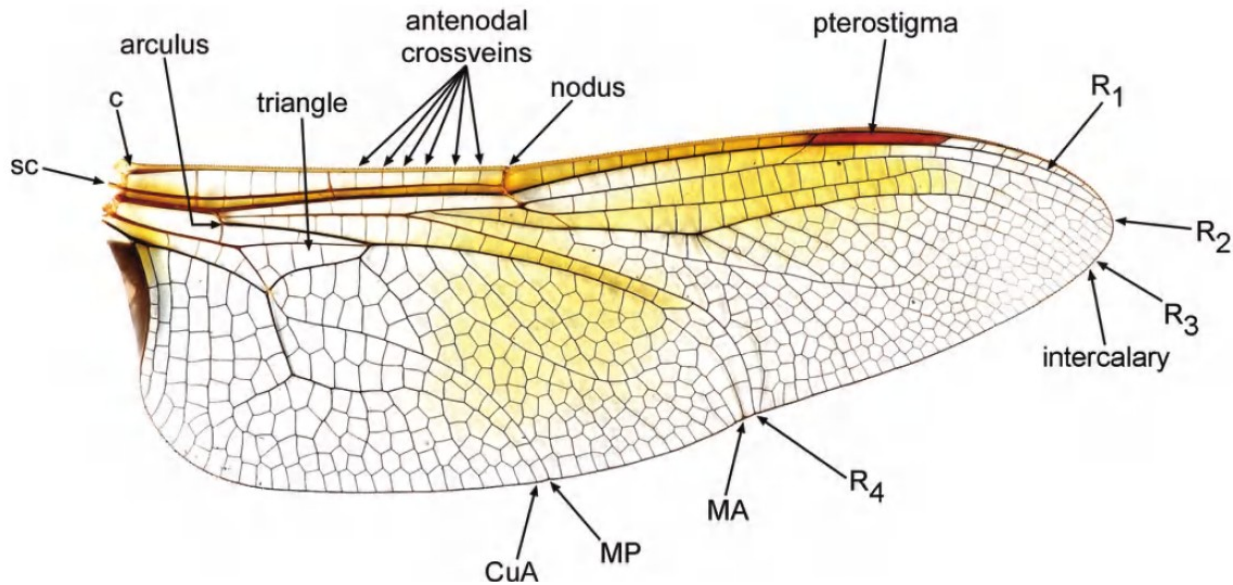
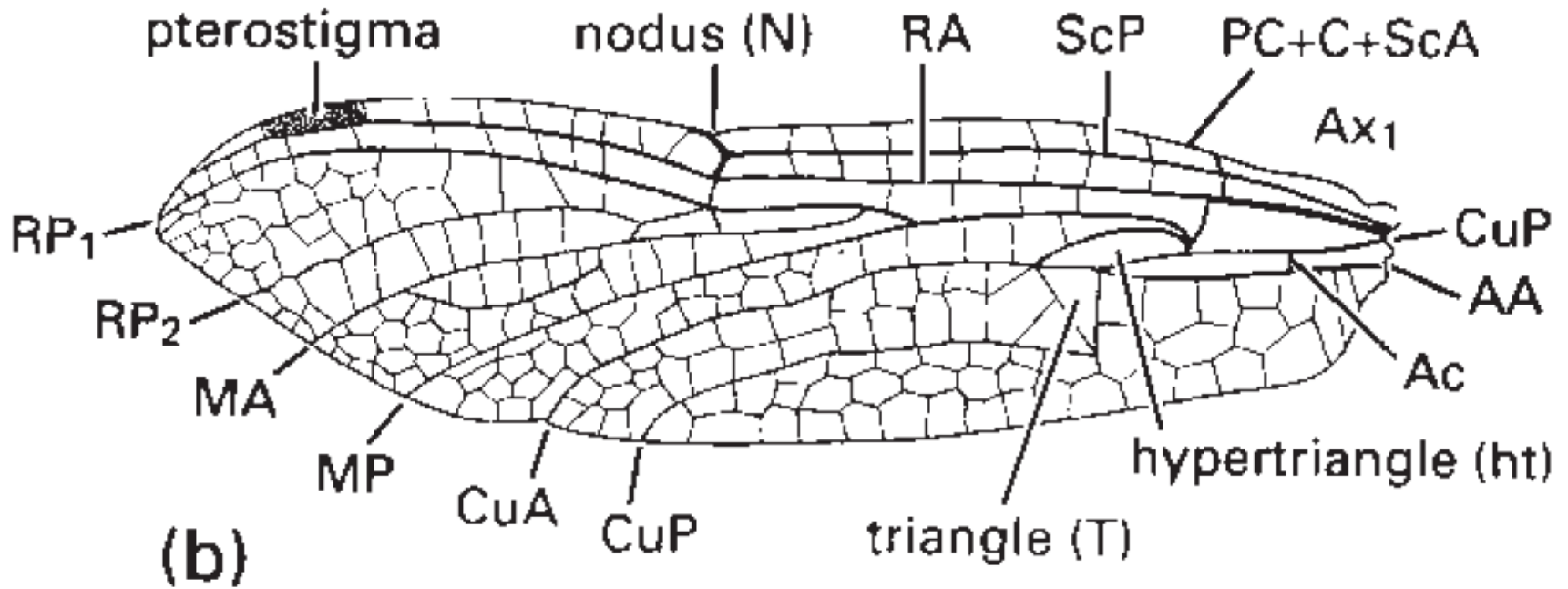


generalized neopteran

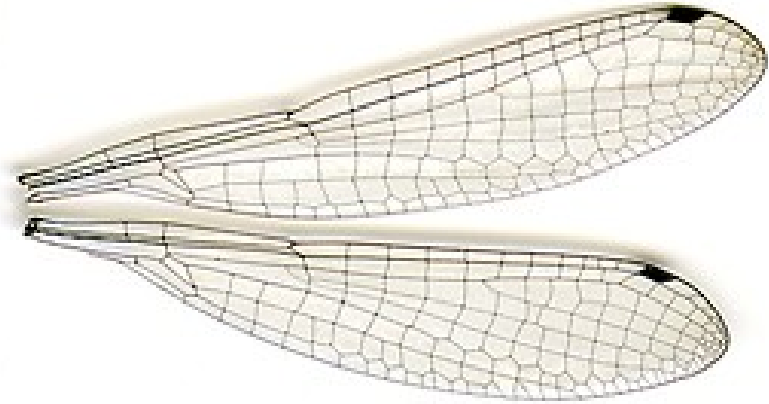
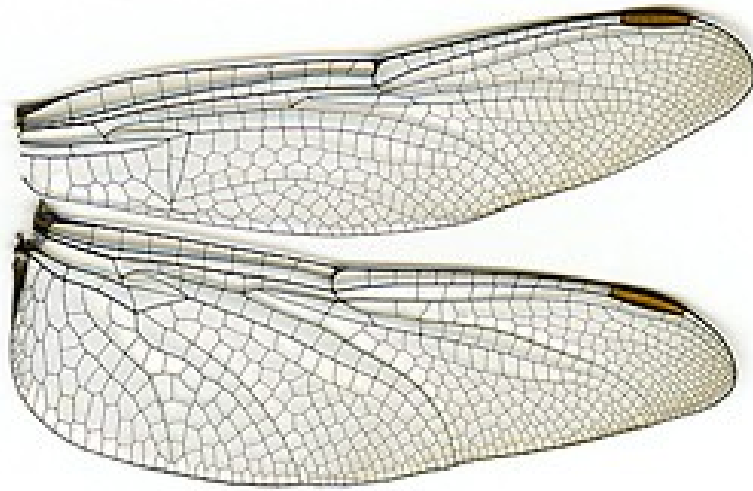


(Blattaria)

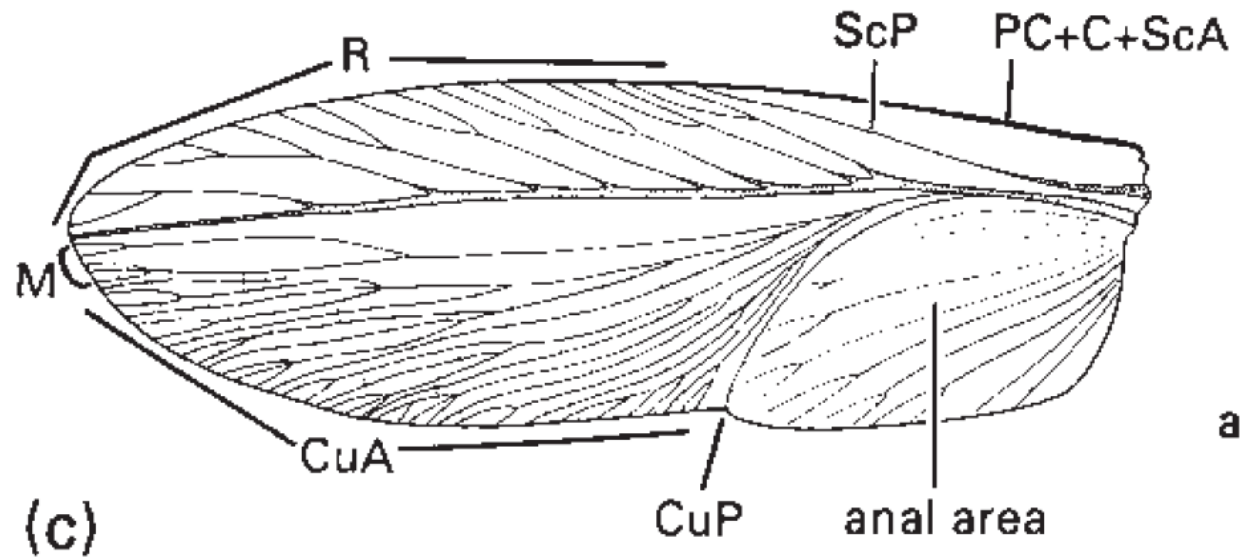
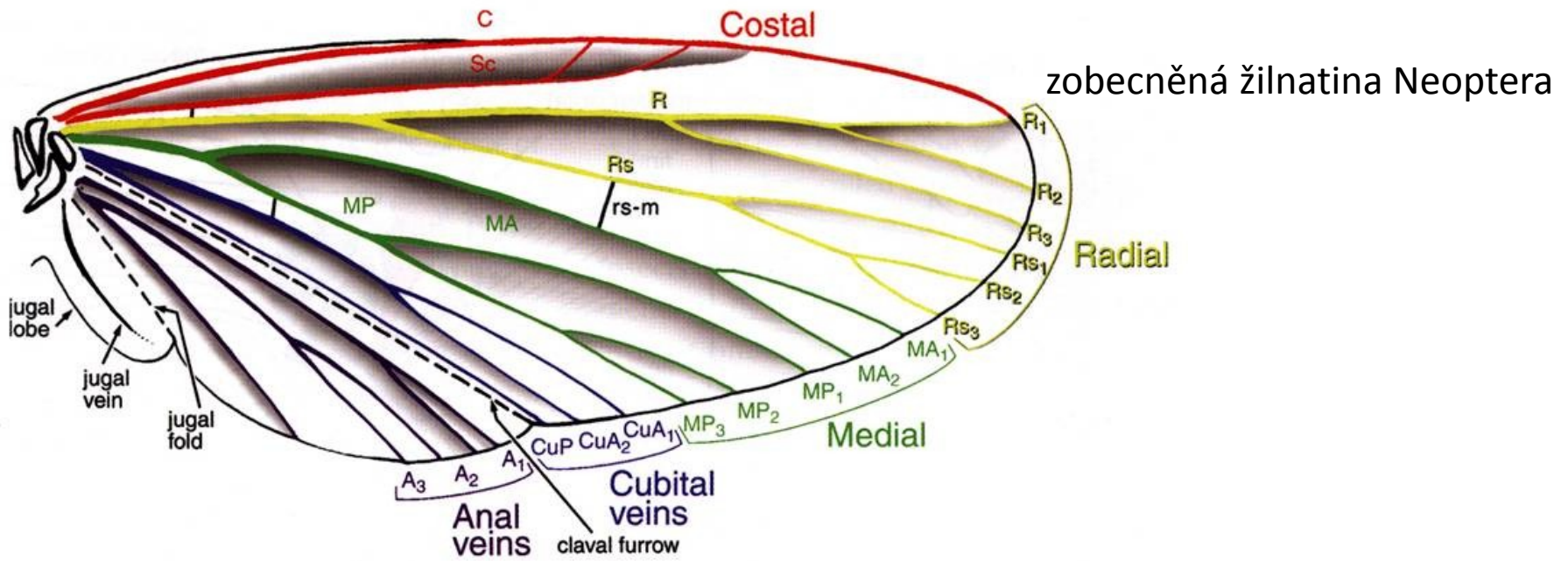
Žilnatina křídla vážky (Odonata)



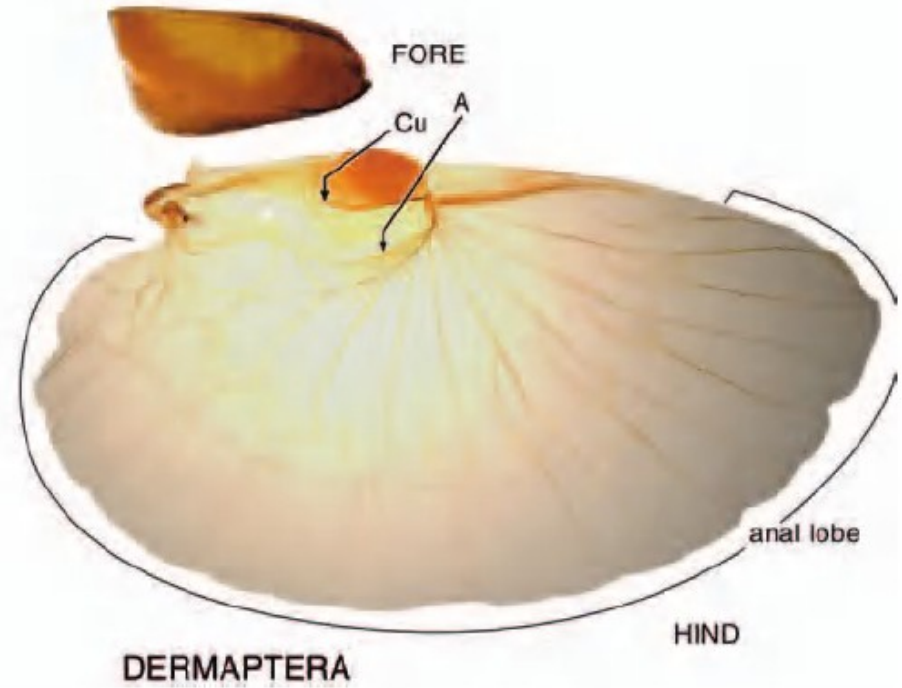
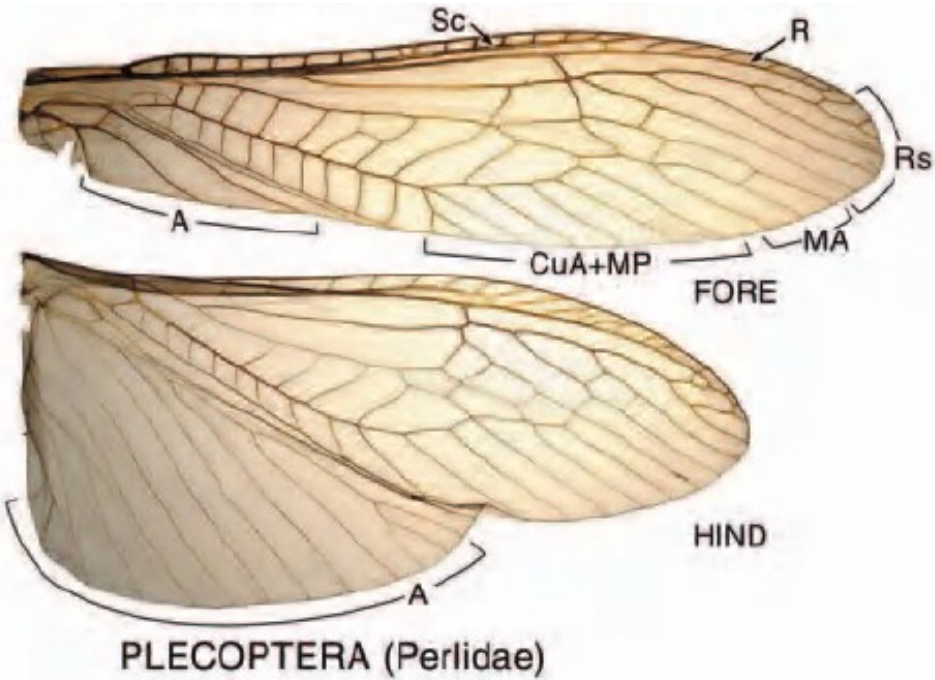
Anisoptera (Vážky + Šídla) x Zygoptera (Motýlice + Šidélka)



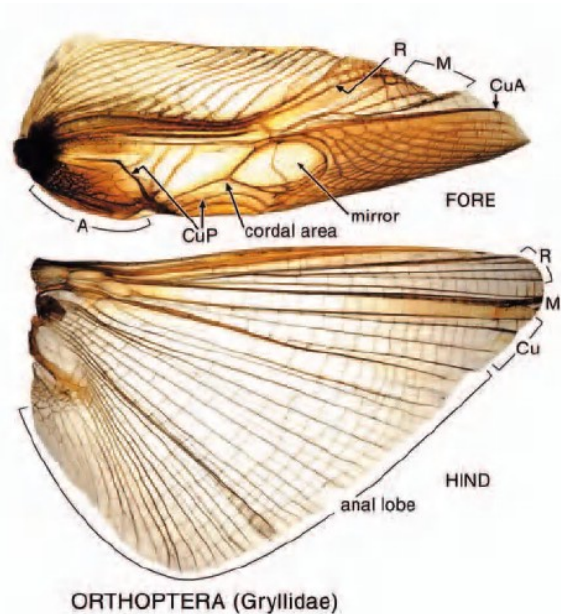
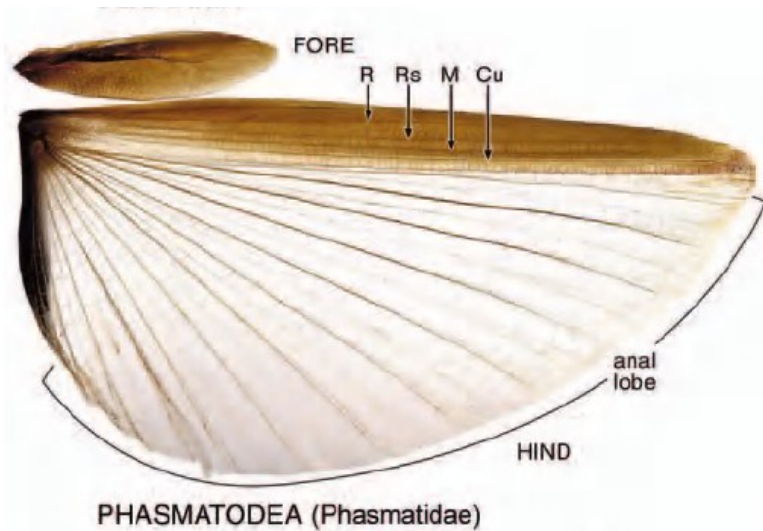
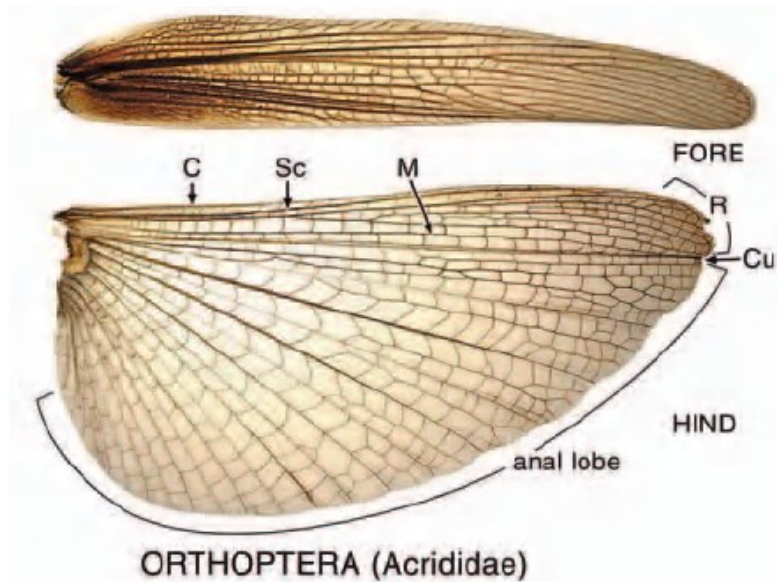
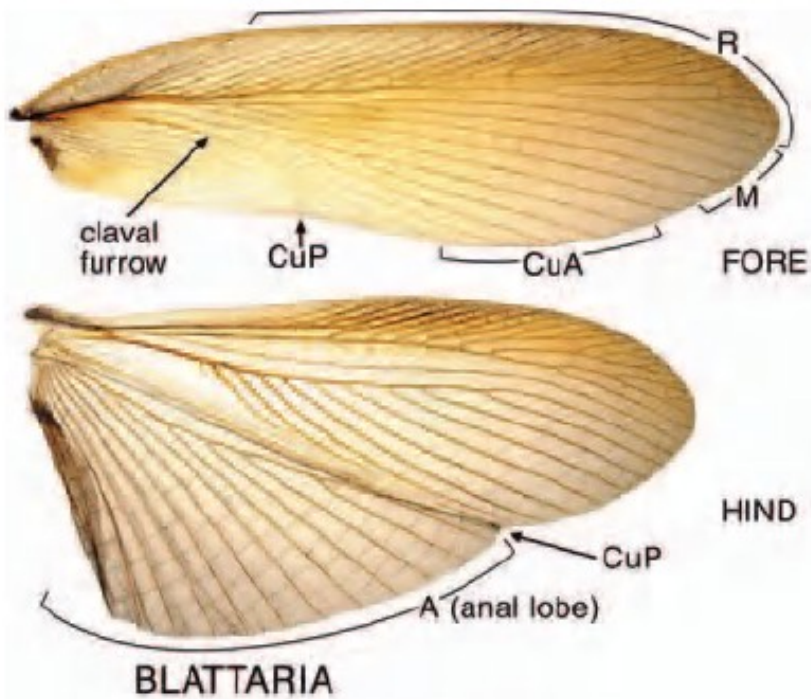
Žilnatina křídla švába (Blattodea)

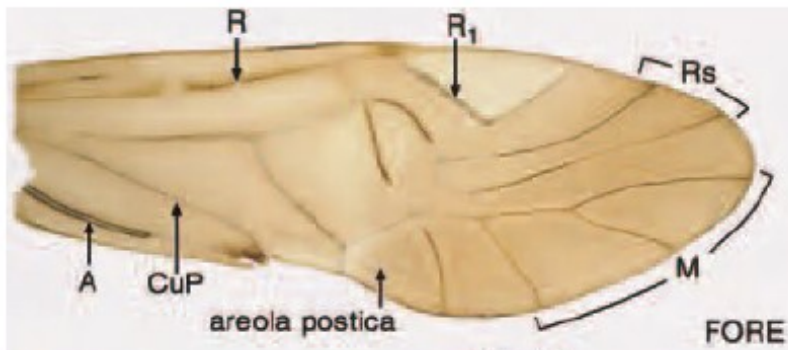


Polyneoptera - Mnohožilní

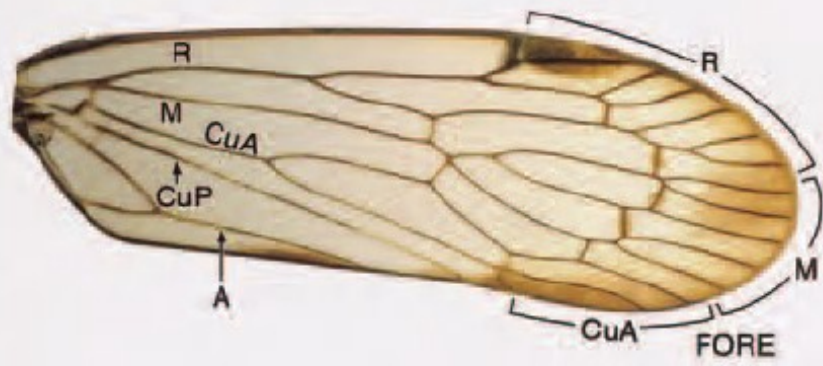


Krytky (tegminae): modifikace 1. páru křídel

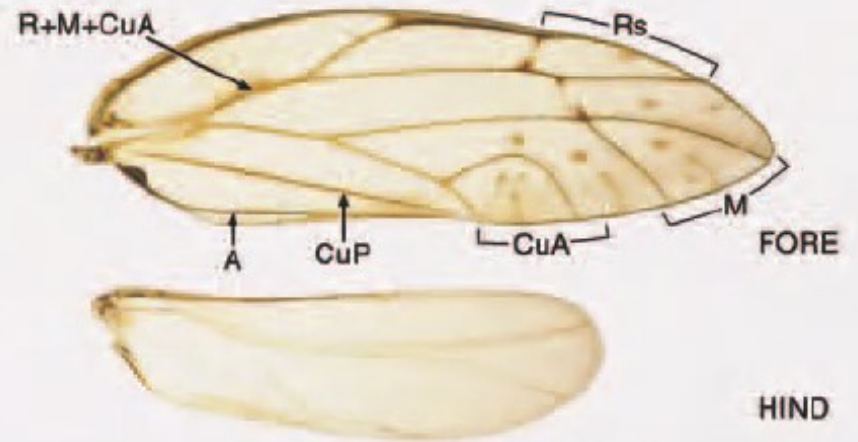




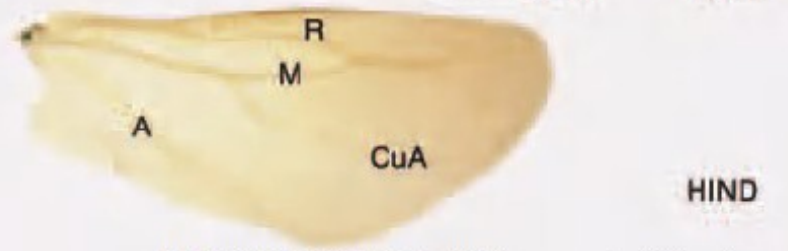
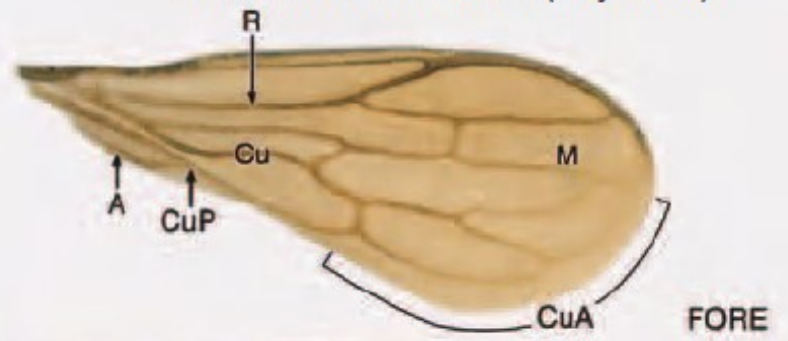
PSOCOPTERA



AUCHENORRHYNCHA (Cixiidae)

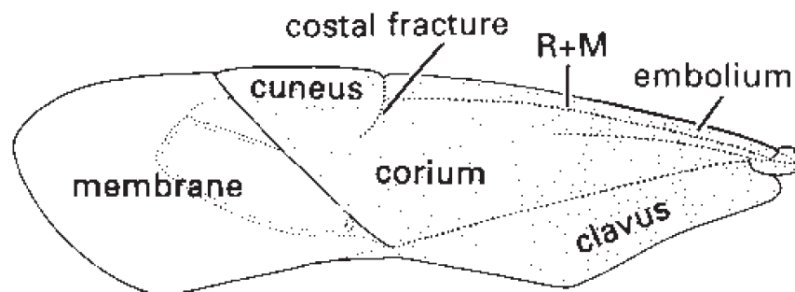
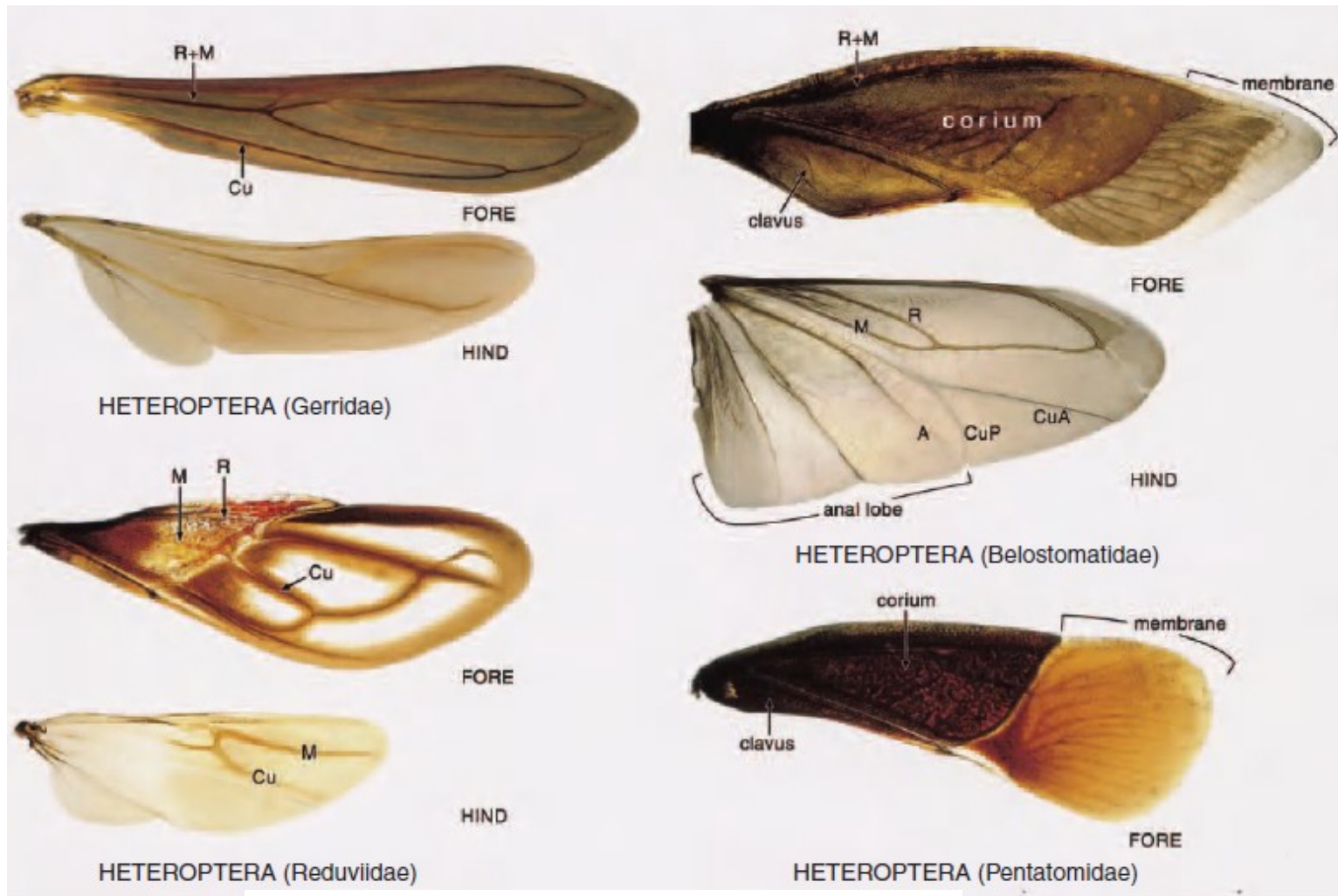


STERNORRHYNCHA (Psyllidae)



HETEROPTERA (Enicocephalidae)

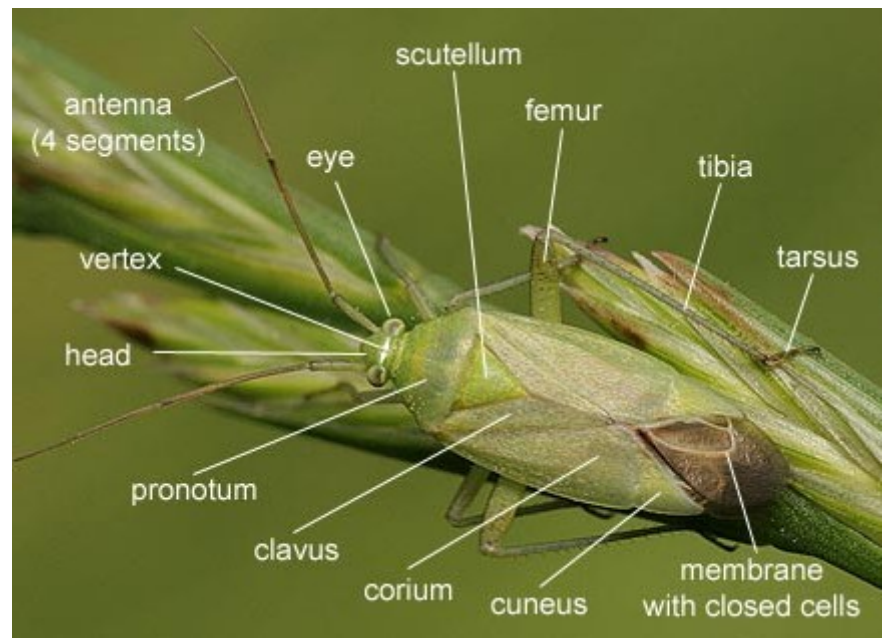
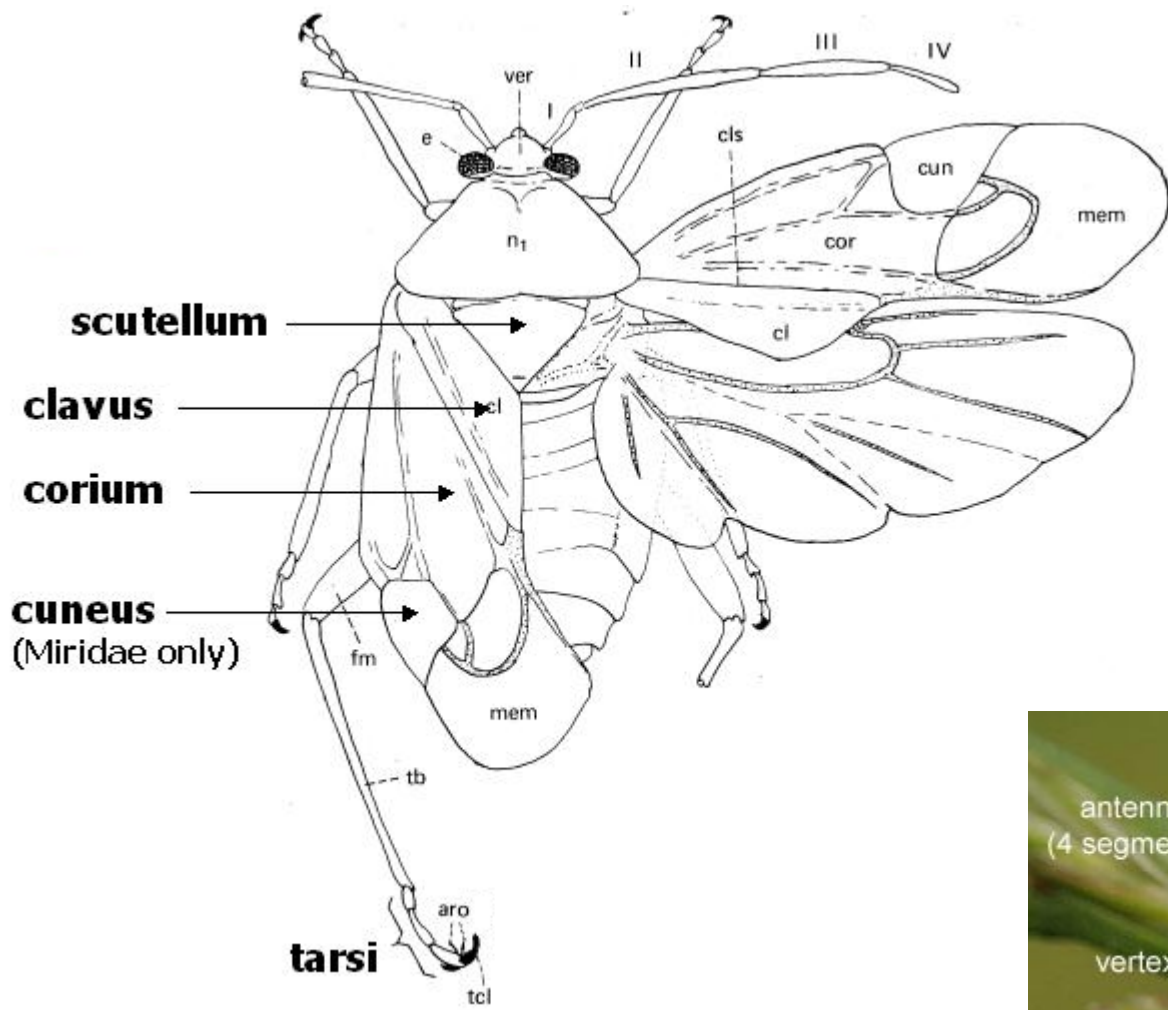
Polokrovky (hemelytrae) - Hemiptera



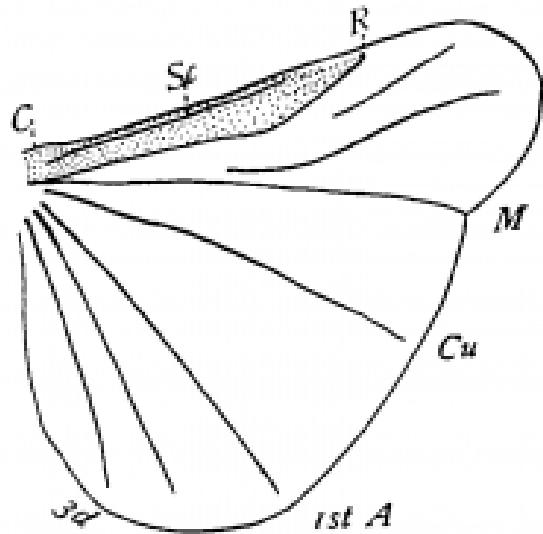
Heteroptera: Miridae

Heteroptera: Hemiptera

Polokrovky (hemielytra)



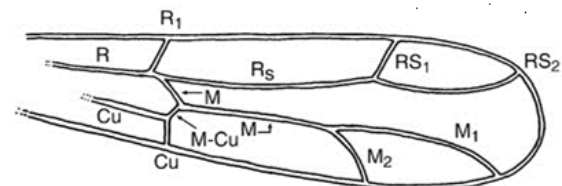
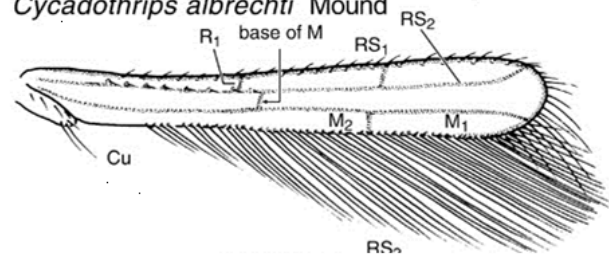
Strepsiptera (Řásnokřídlí)



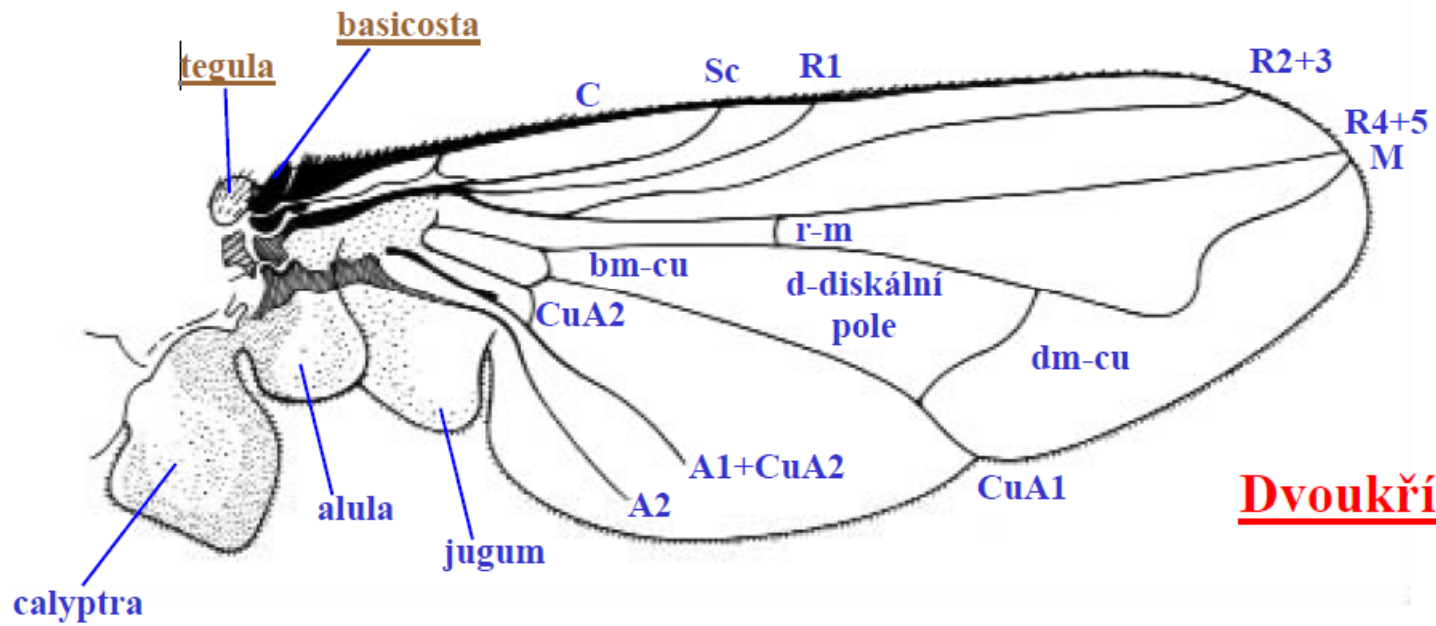
Thysanoptera (Třásnokřídlí)



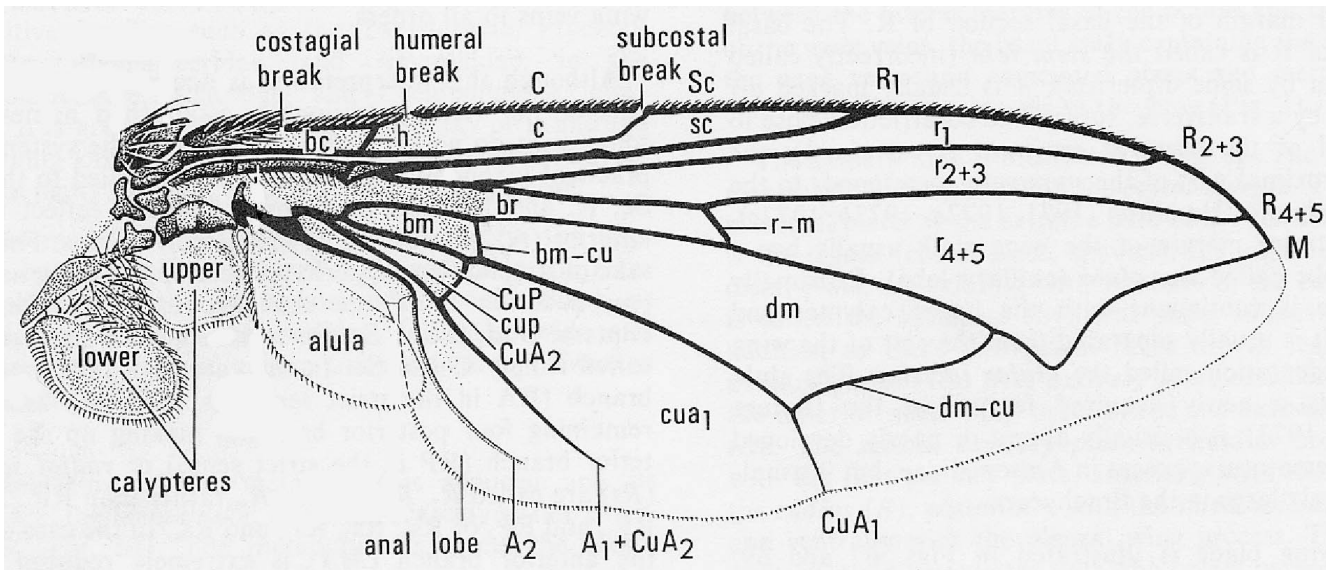
Cycadothrips albrechti Mound

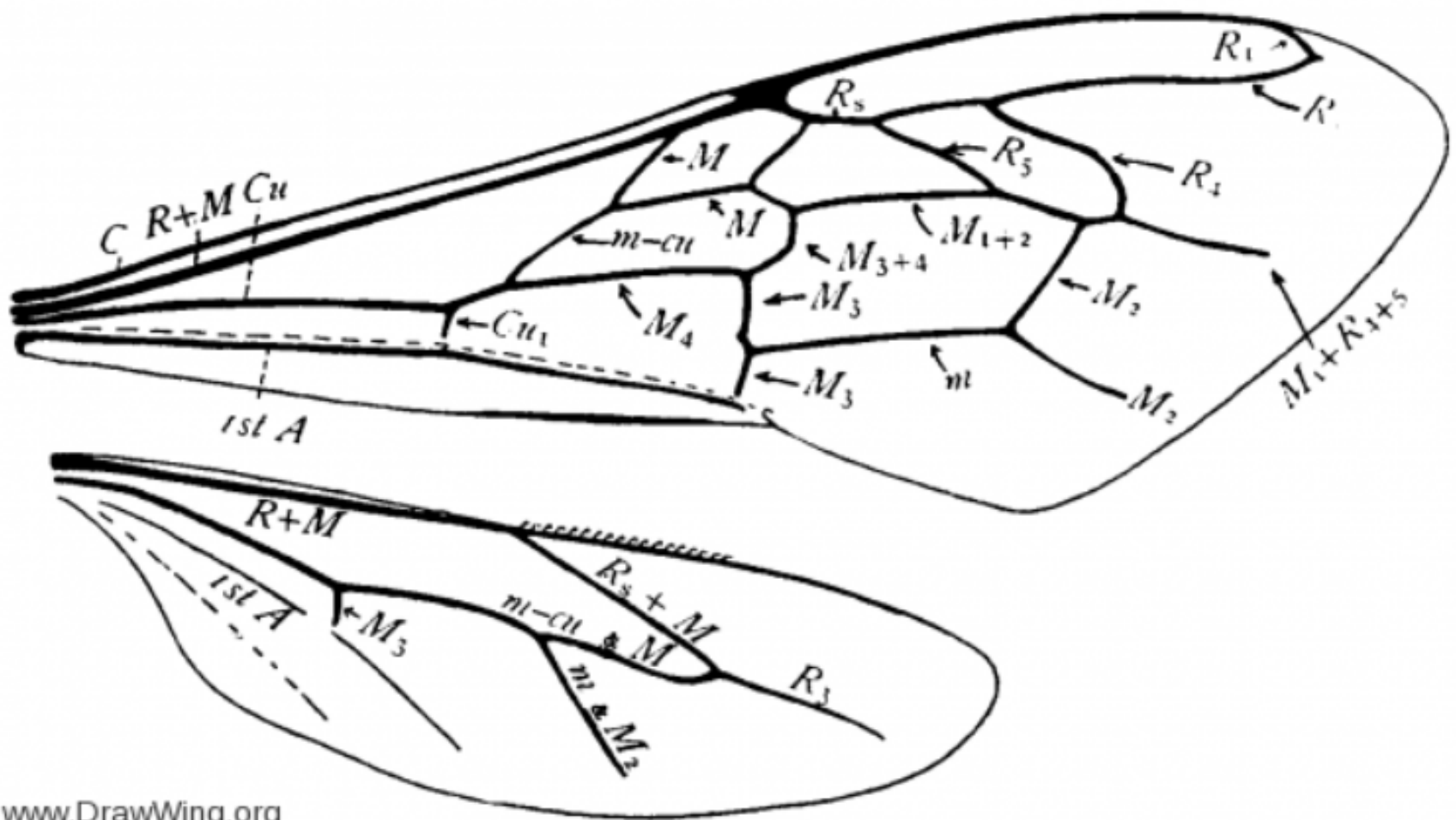


Triassothrips virginicus, n.sp.



Dvoukřídli

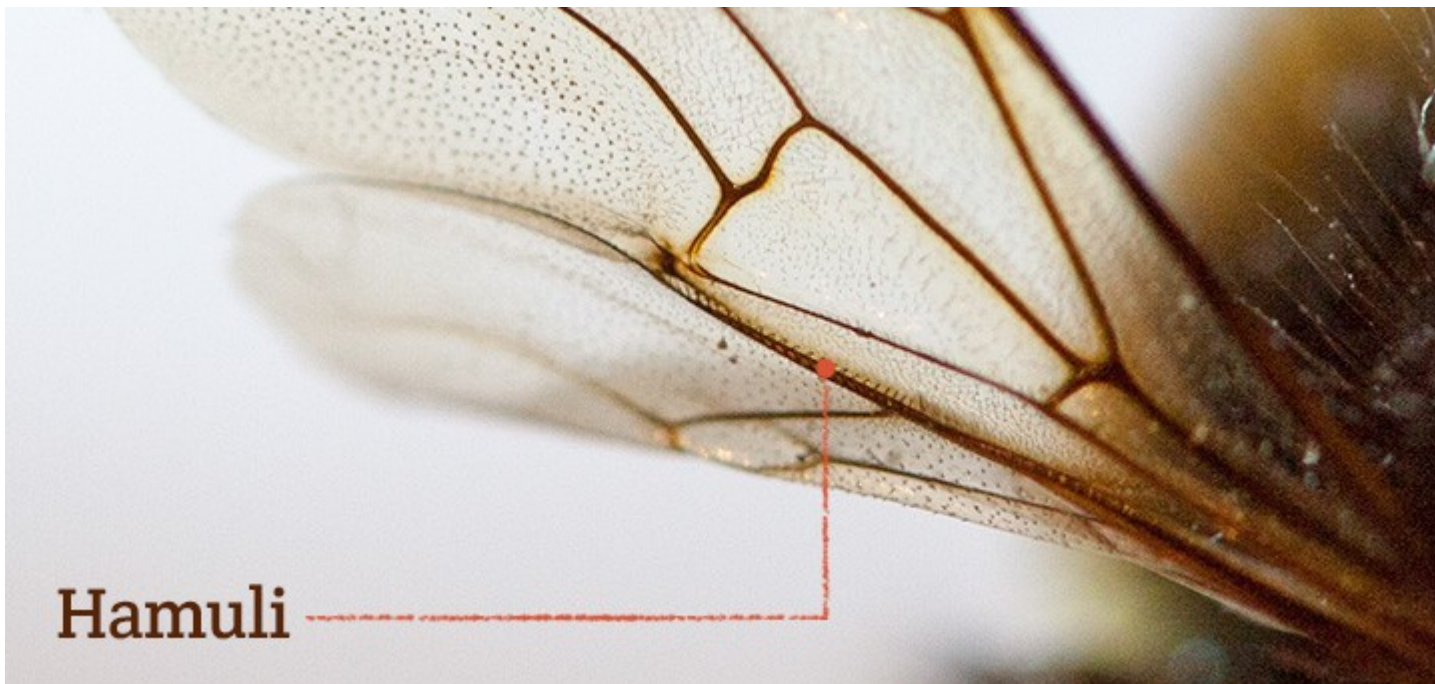
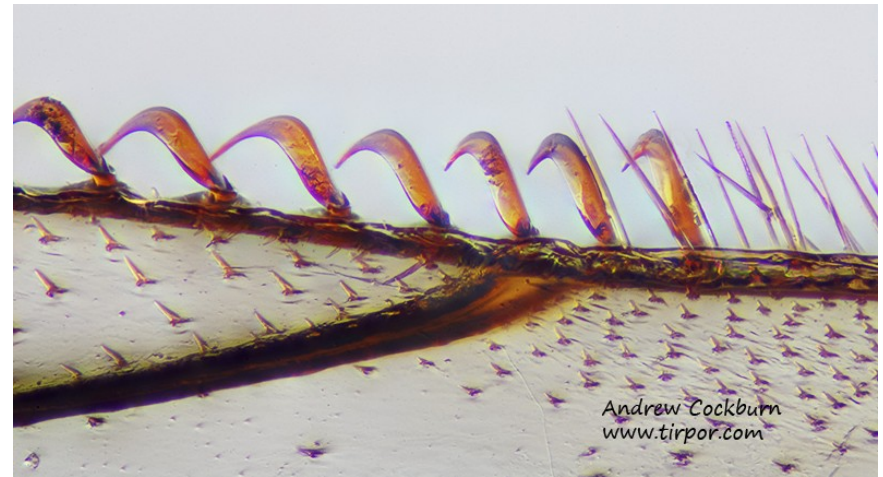
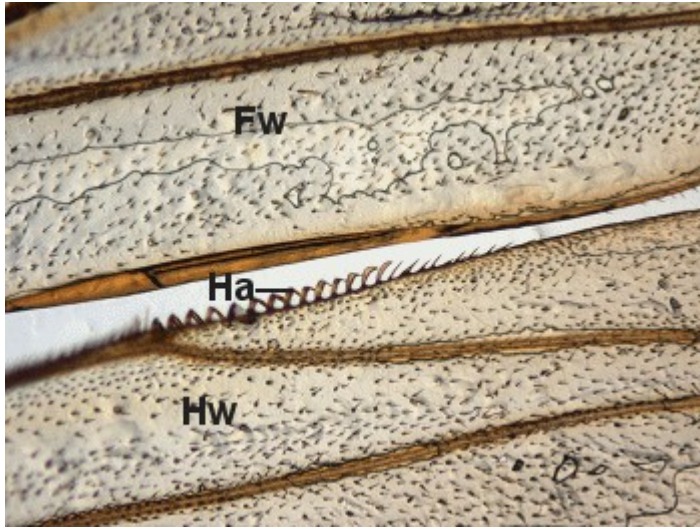




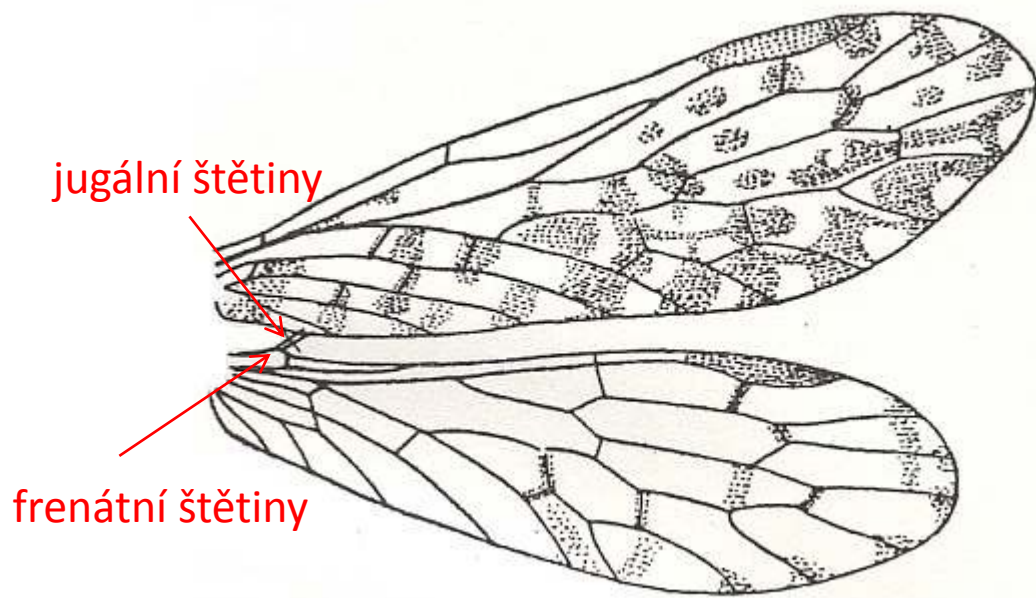
www.DrawWing.org

Wings of honey bee *Apis mellifera*. From Comstock (fig. 387) [1].

Hamulární spojení křídel - Hymenoptera

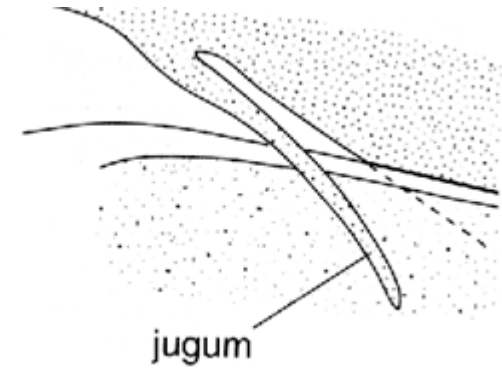
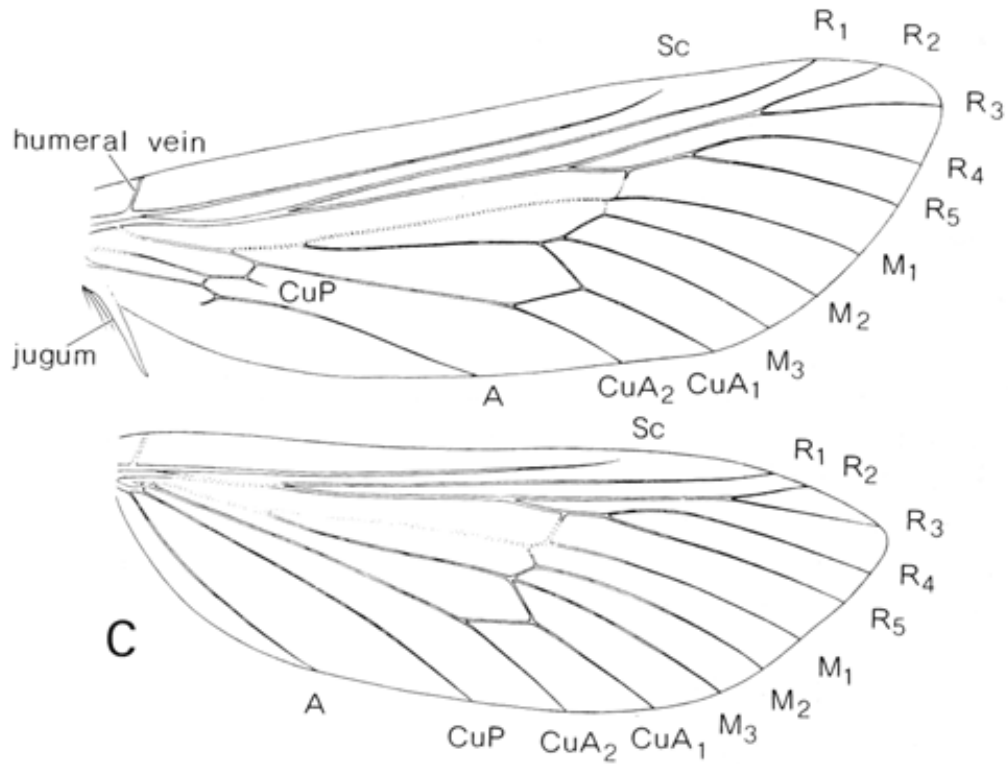


Mecopteroidní spojení křídel - Mecoptera



Jugátní spojení křídel – Lepidoptera (Hepialidae)

- jugální lalůček předního křídla nadzvedává zadní křídlo

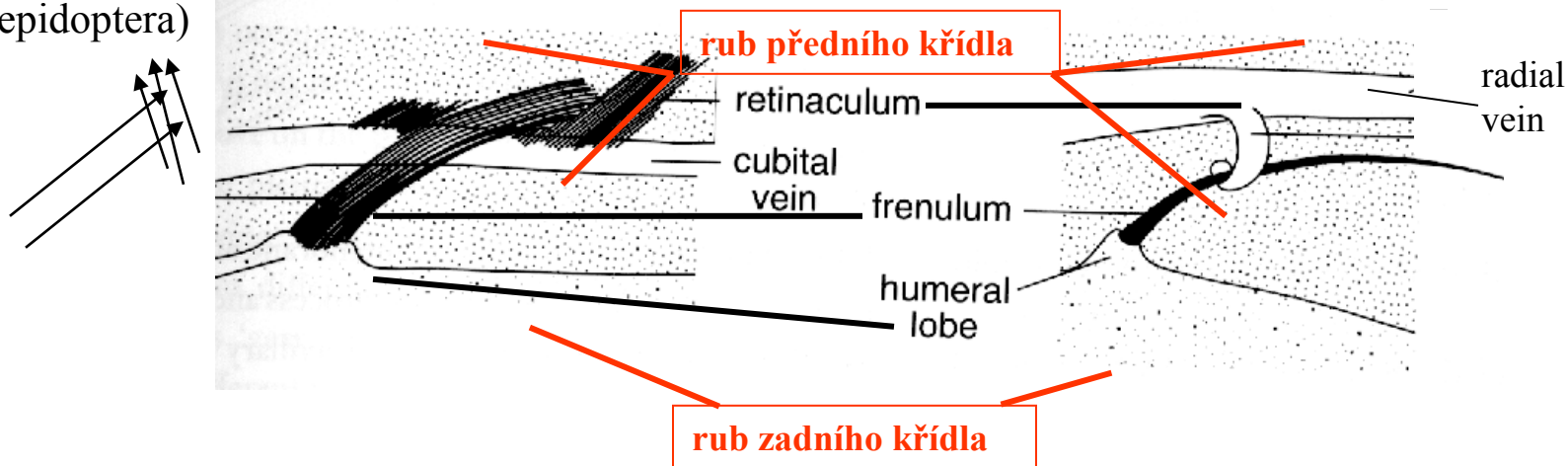


Frenátní spojení křídel – Lepidoptera: Sphingidae

- samci: háček z radiální žilky předního křídla zachytává frenulum (1 šetina)
- samice: frenulum – více štětin, zachyceno do retinacula z cubitální žilky

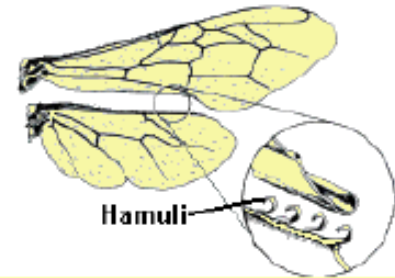
Frenátní typ - samice, lišaj *Hippotion*
(Lepidoptera)

Frenátní typ - samec, lišaj *Hippotion* (Lepidoptera)



Spojení křídel

Pohled z ventrální strany křídel



Primitivní mecopteroidní typ (*Taeniochorista*, Mecoptera)

Jugátní typ, můra *Charagia* (Lepidoptera)



Frenátní typ - **samice**, lyšaj *Hippotion* (Lepidoptera)

Frenátní typ - **samec**, lyšaj *Hippotion* (Lepidoptera)

