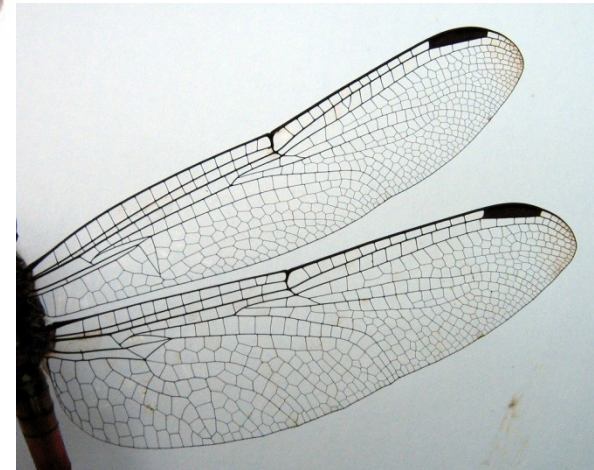
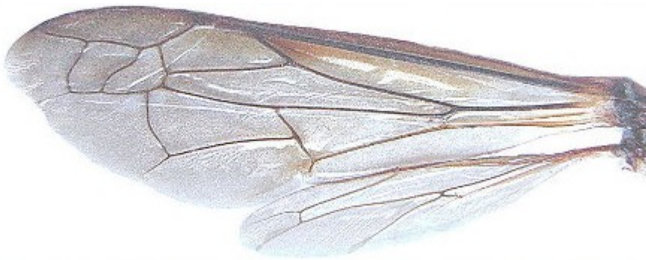


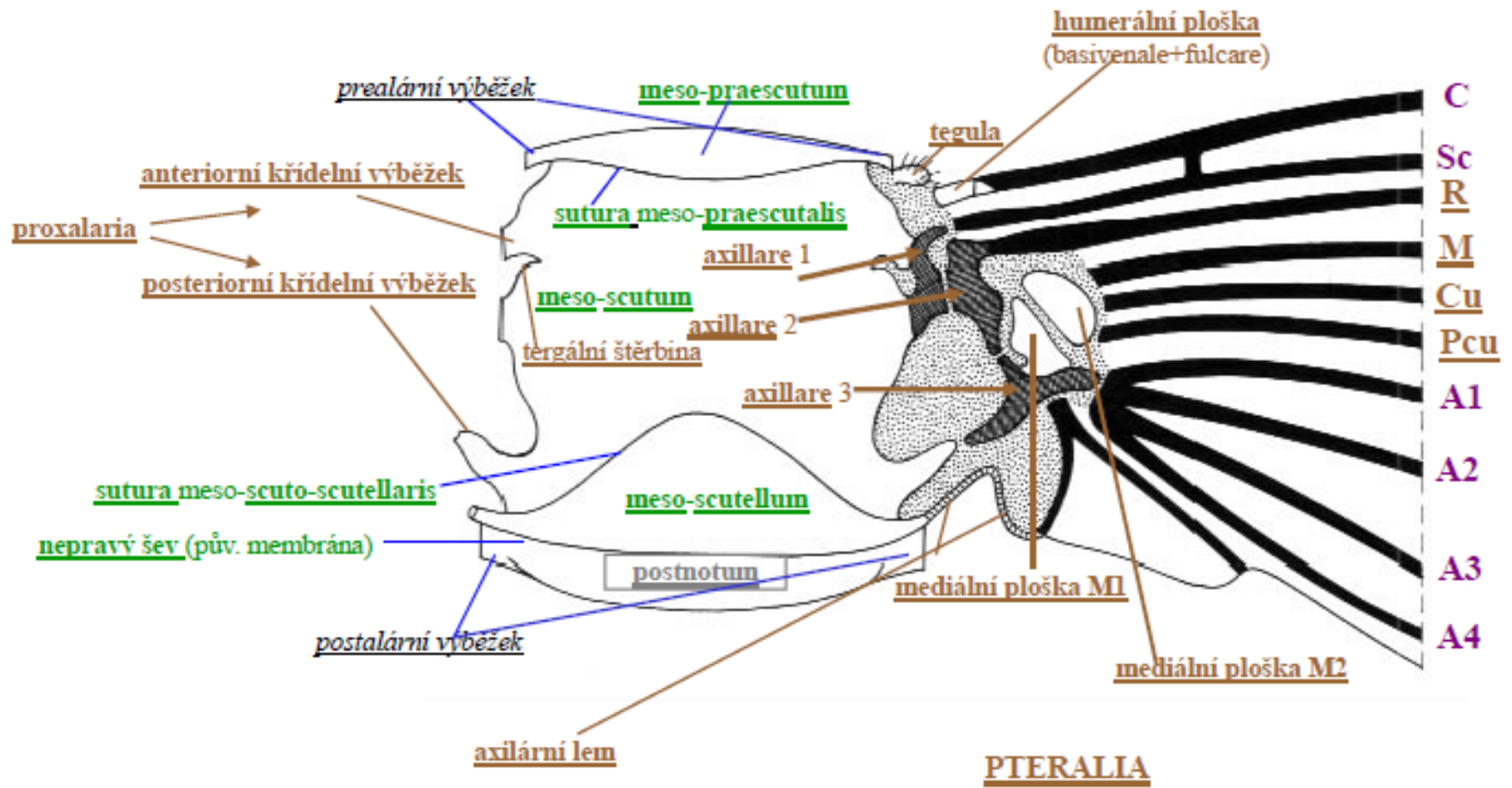
# Základy entomologie

## cvičení 5

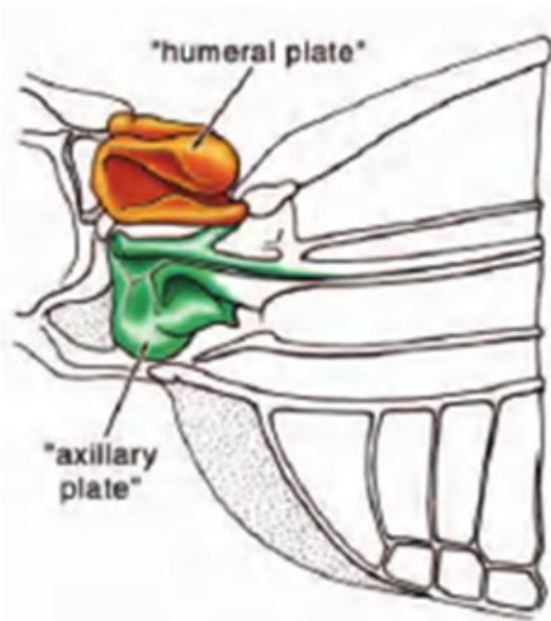
# Křídlo



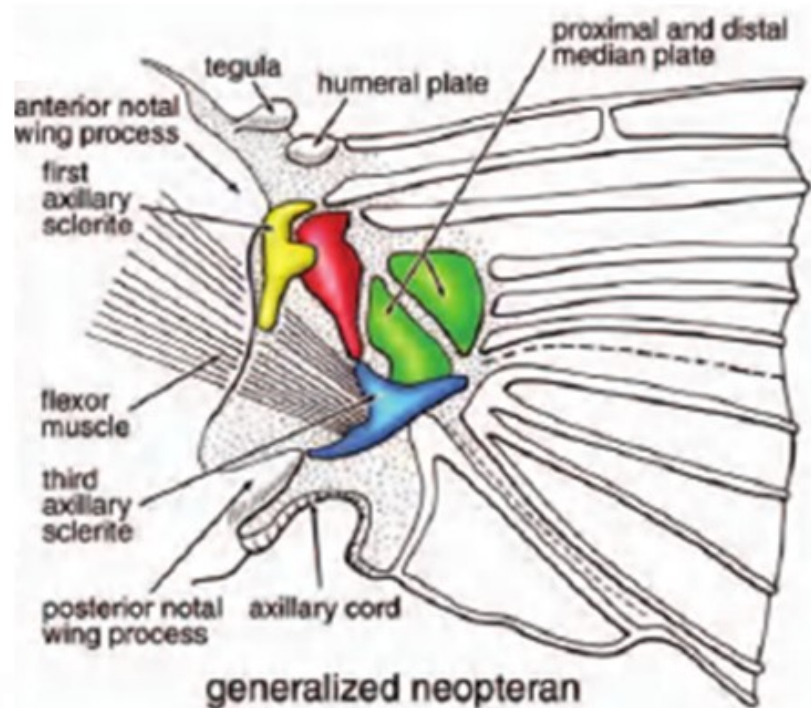
# Pterothorax a zakloubení křídla - dorzální pohled na mesothorax



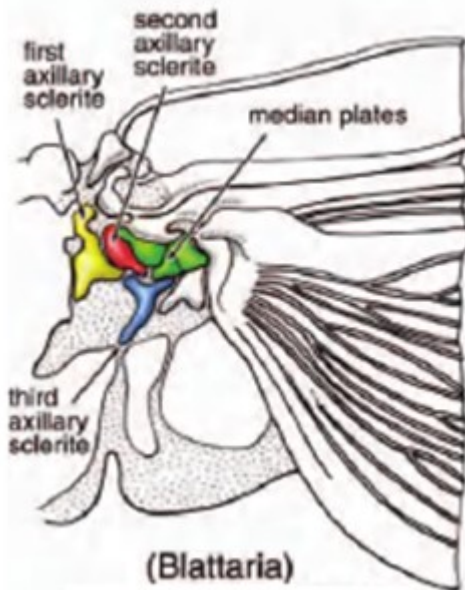
# Struktura báze křídla: bazální sklerity (pteralia)



paleopteran (Odonata)

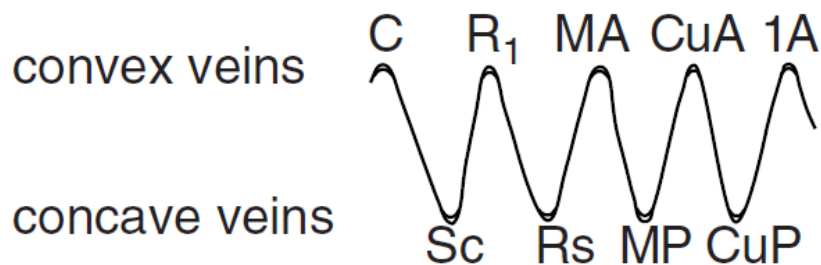
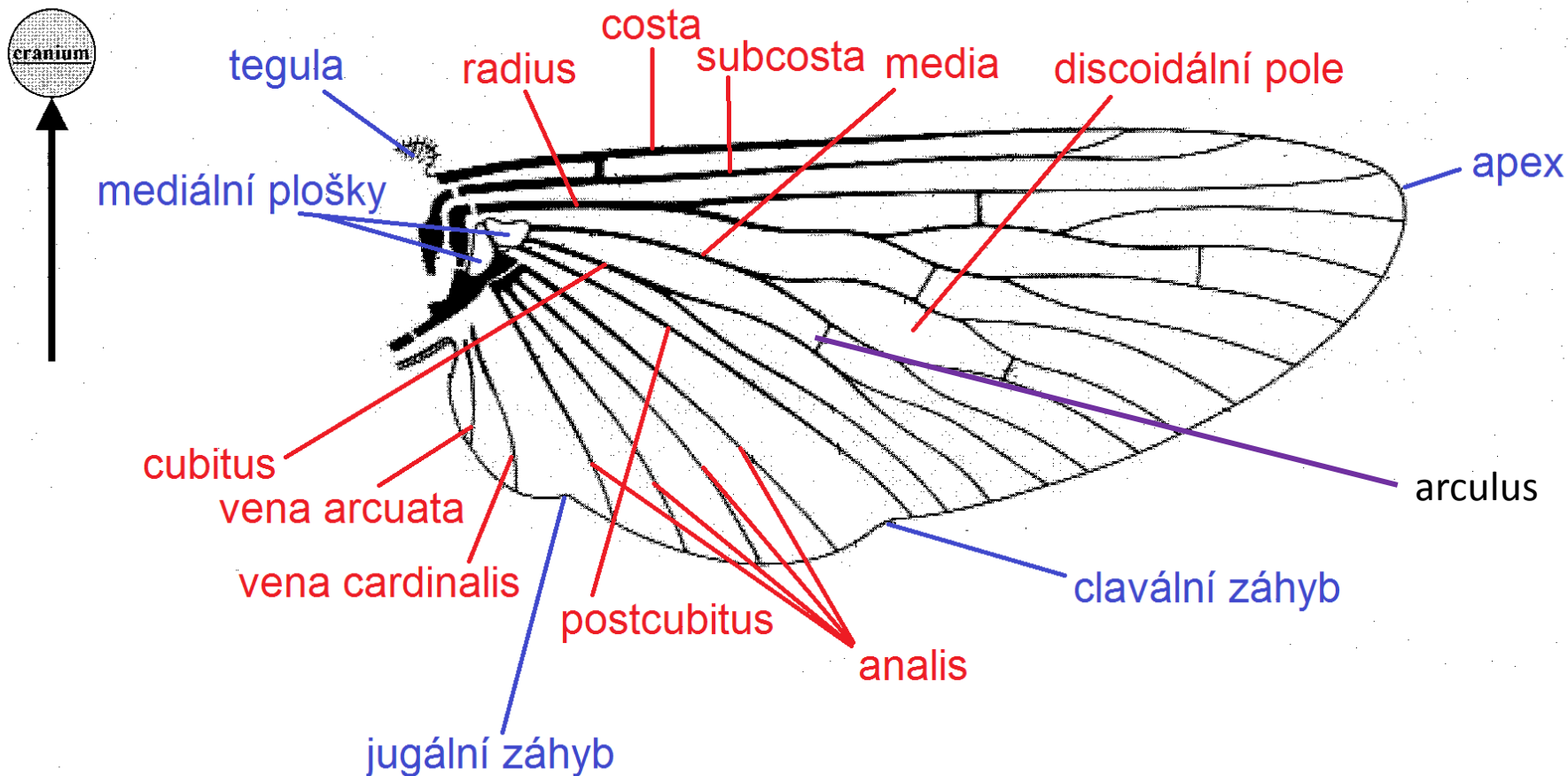


generalized neopteran



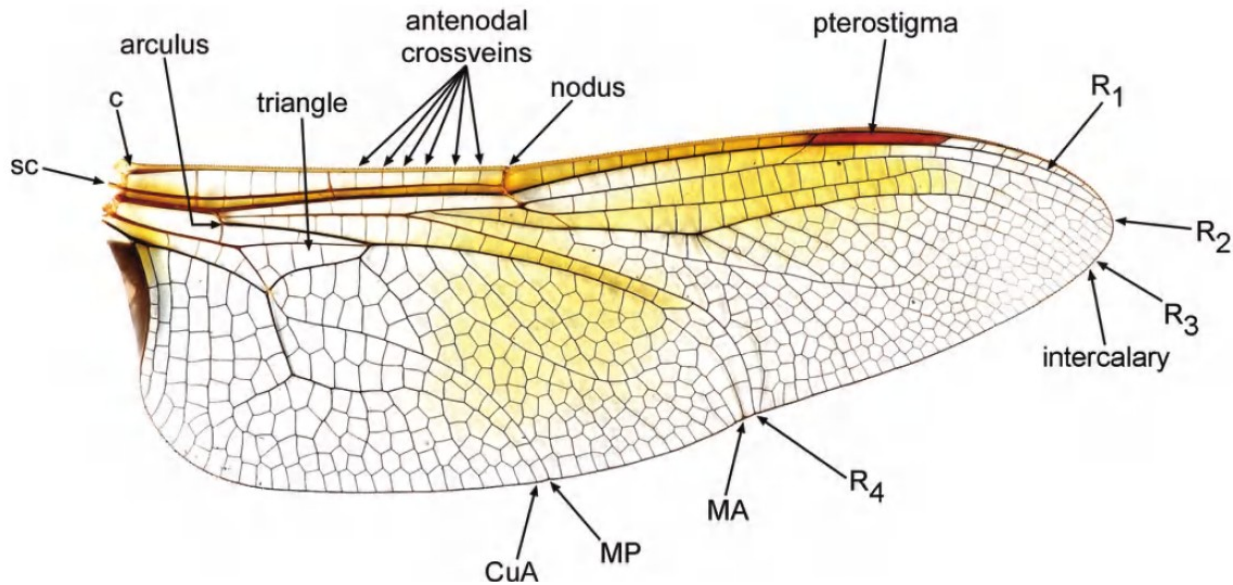
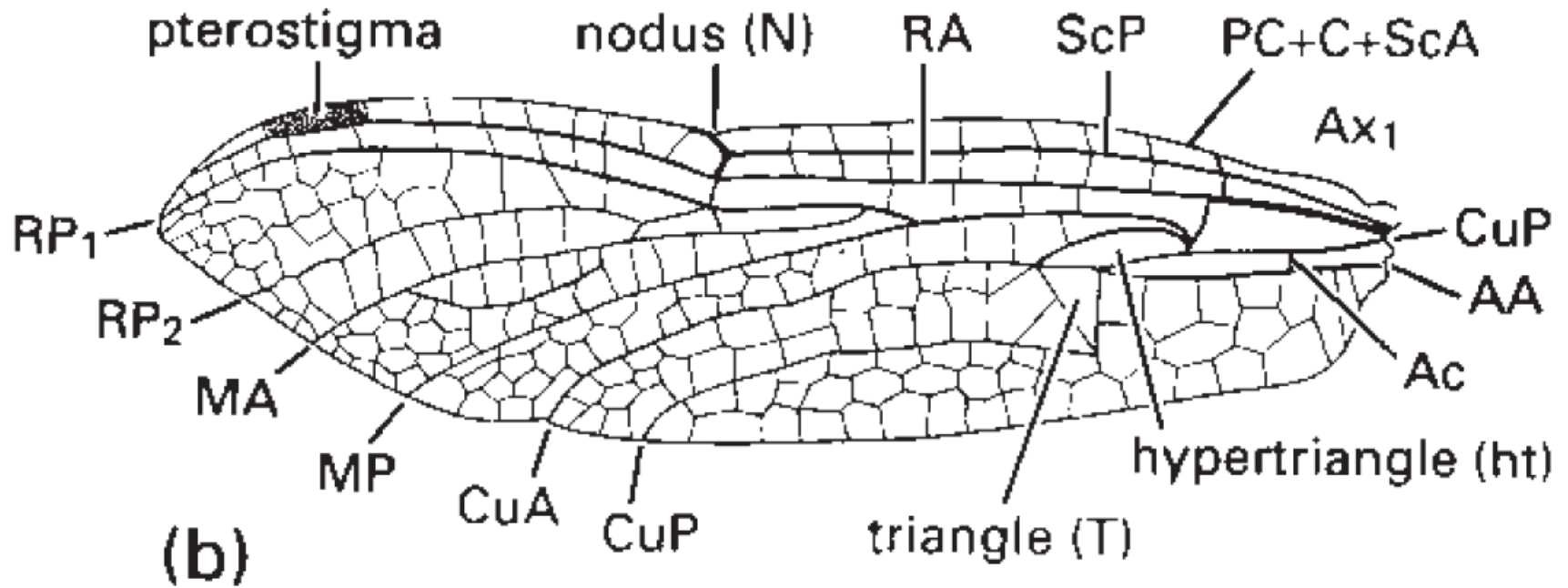
(Blattaria)

# Žilnatina křídla – obecné schéma

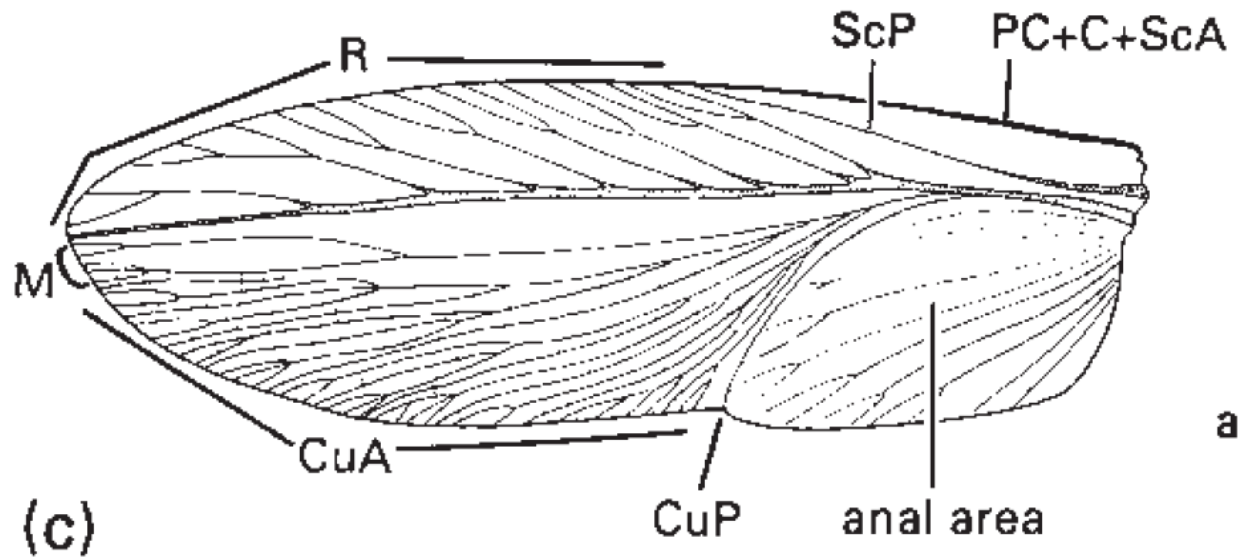
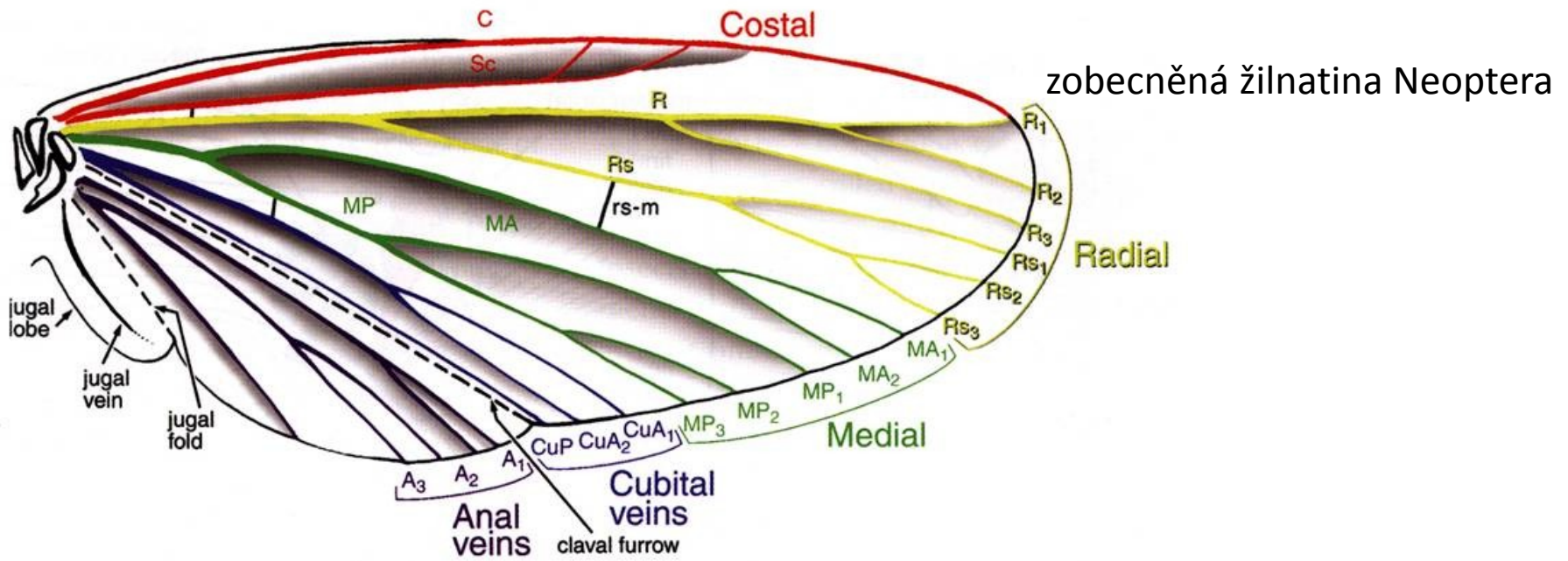




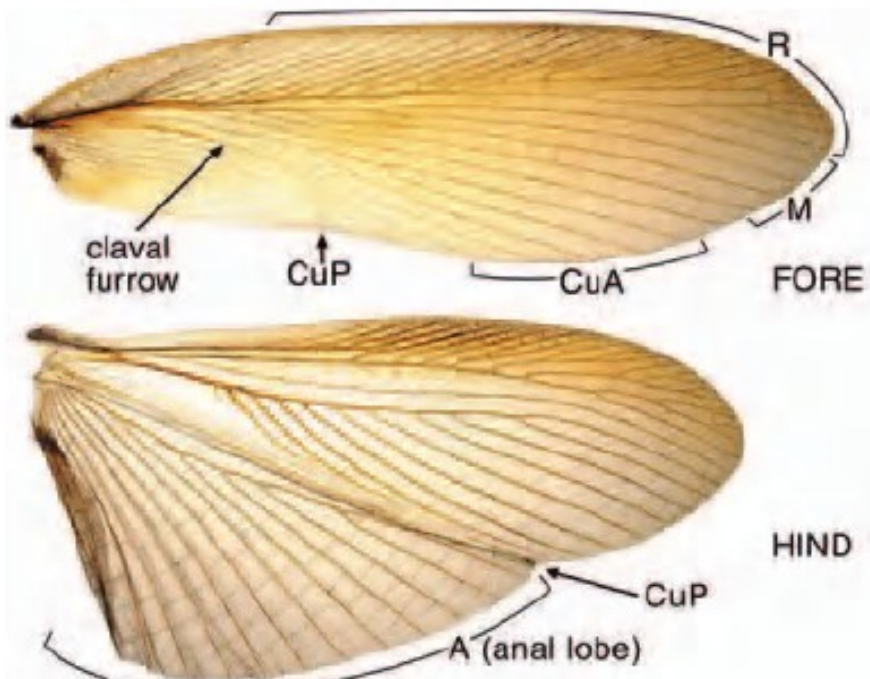
# Žilnatina křídla vážky (Odonata)



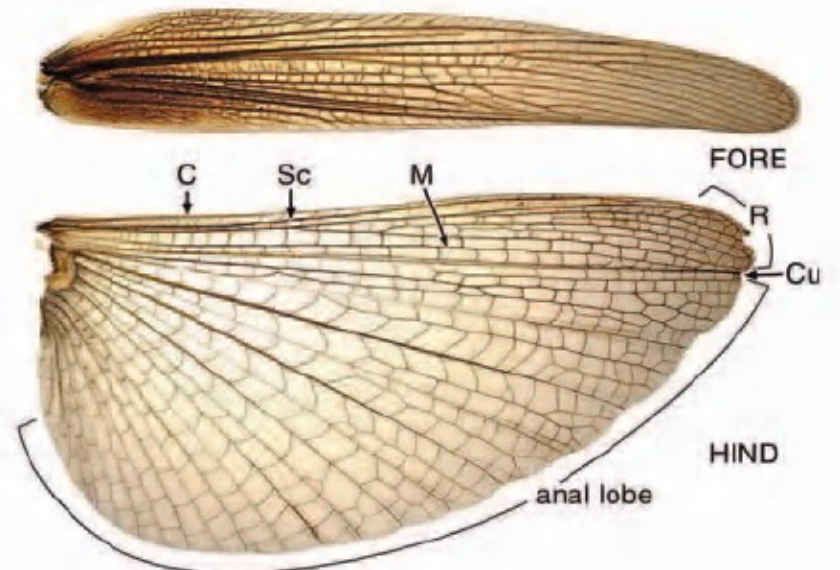
# Žilnatina křídla švába (Blattodea)



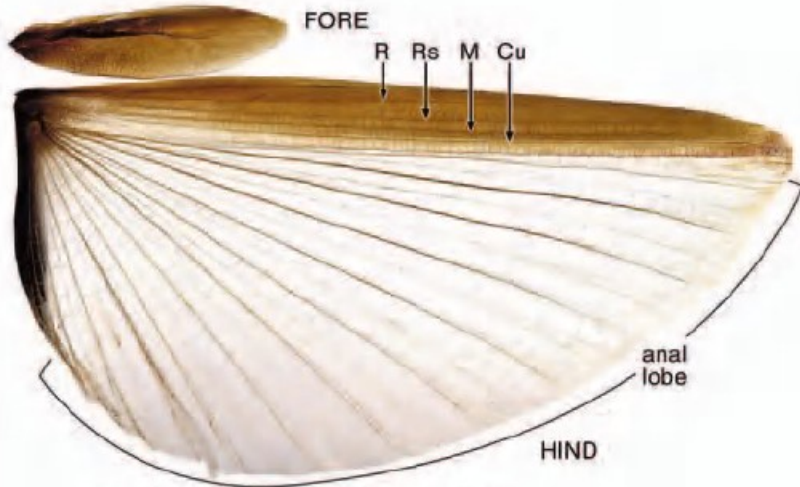




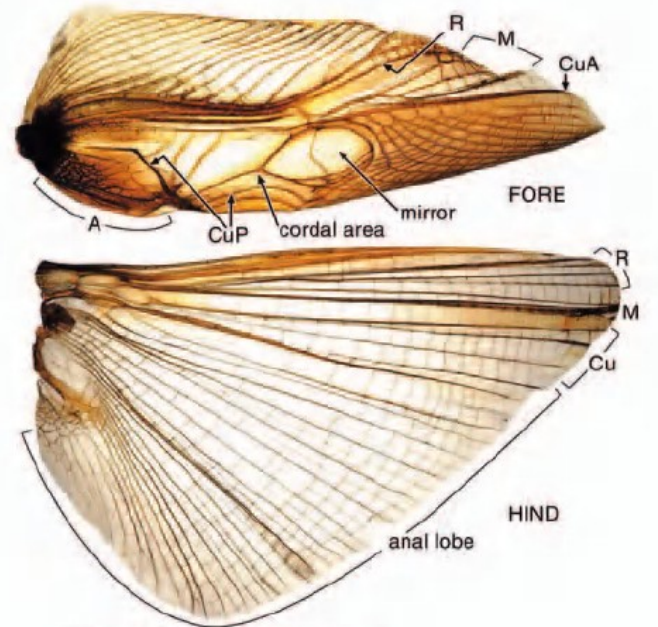
**BLATTARIA**



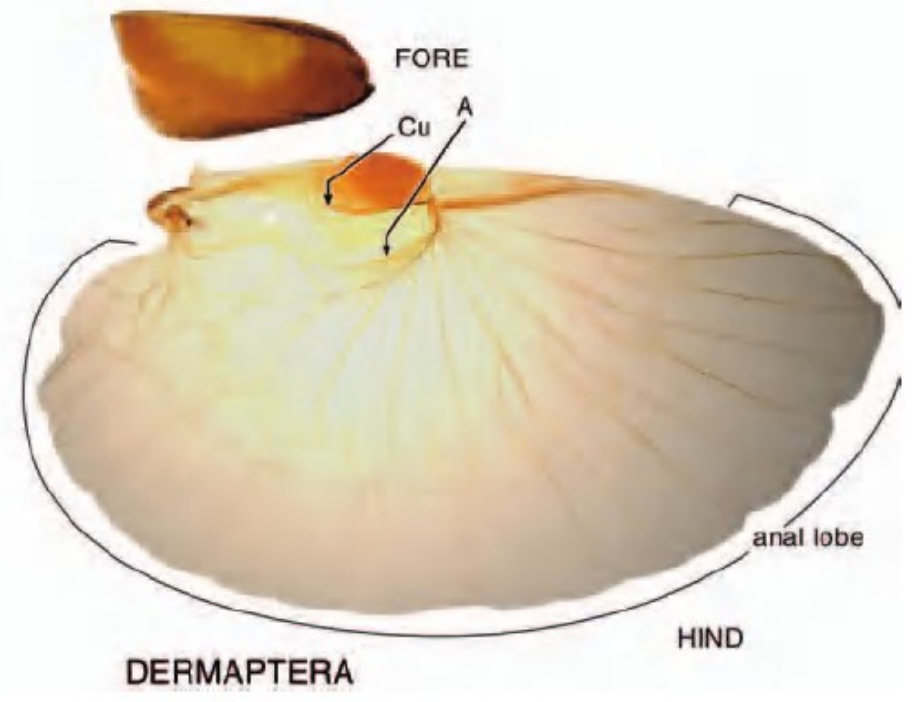
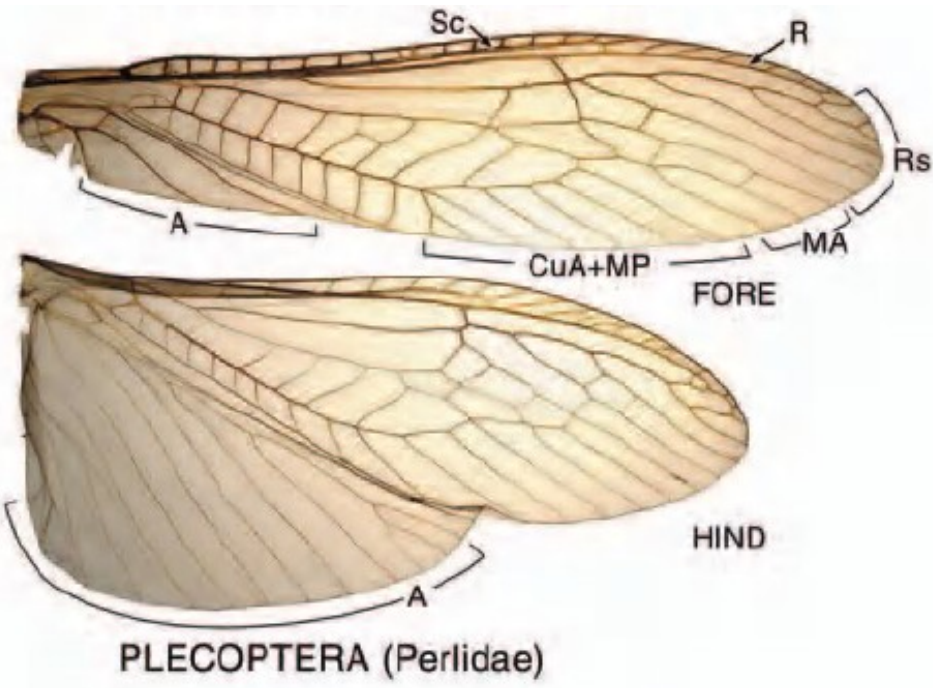
**ORTHOPTERA (Acrididae)**



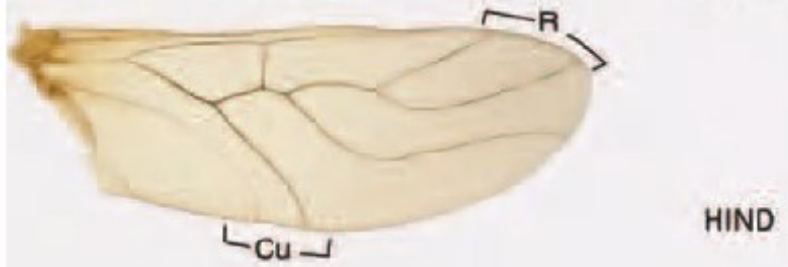
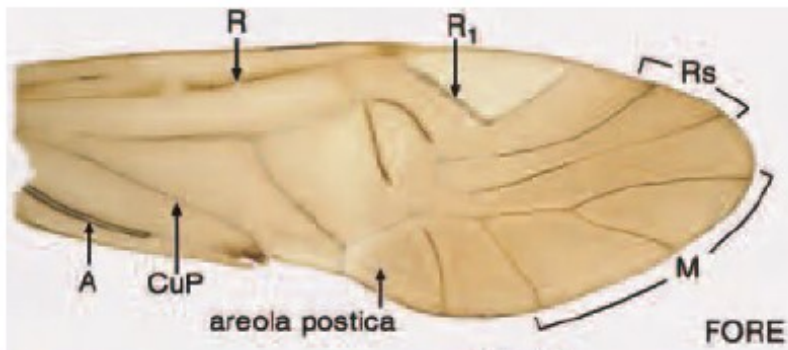
**PHASMATODEA (Phasmatidae)**



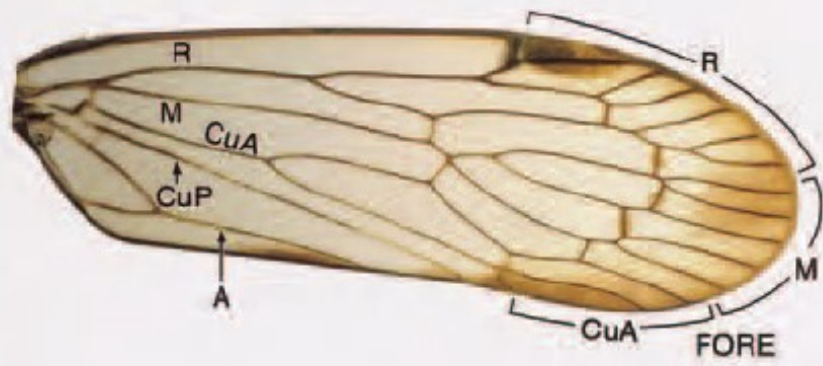
**ORTHOPTERA (Gryllidae)**



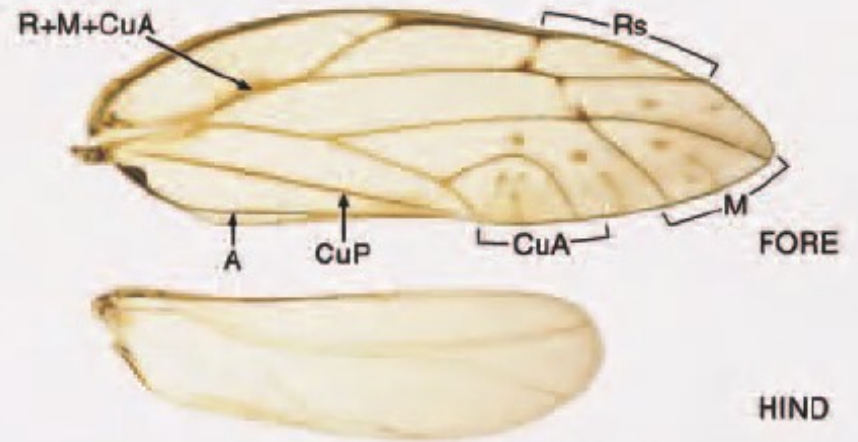




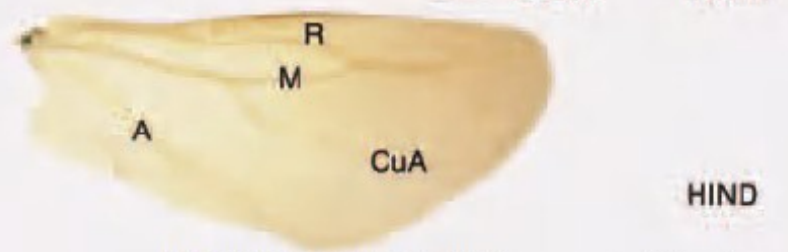
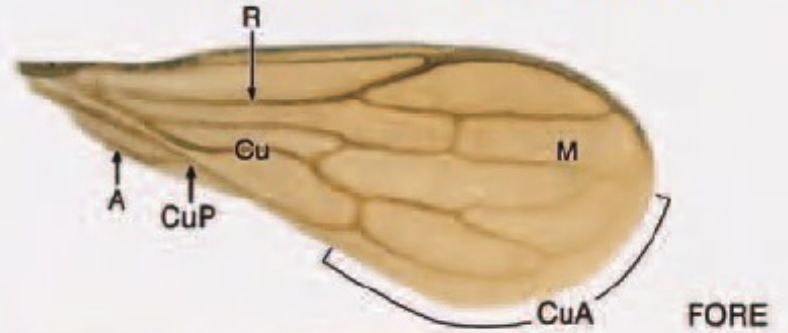
PSOCOPTERA



AUCHENORRHYNCHA (Cixiidae)



STERNORRHYNCHA (Psyllidae)



HETEROPTERA (Enicocephalidae)



FORE

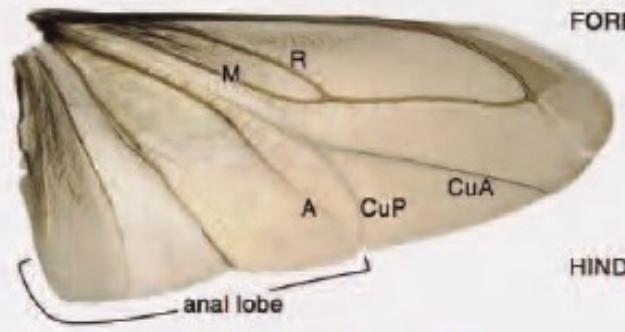


HIND

HETEROPTERA (Gerridae)

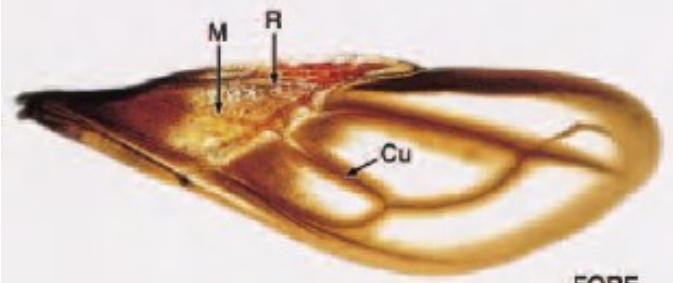


FORE



HIND

HETEROPTERA (Belostomatidae)

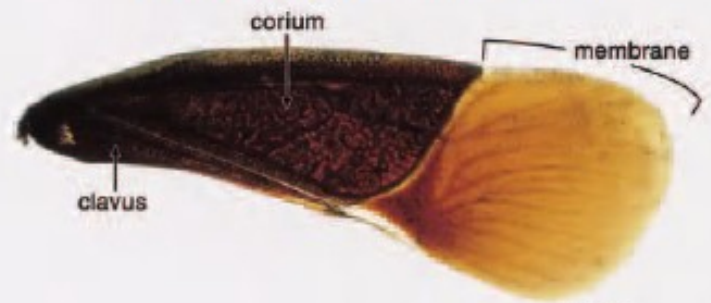


FORE



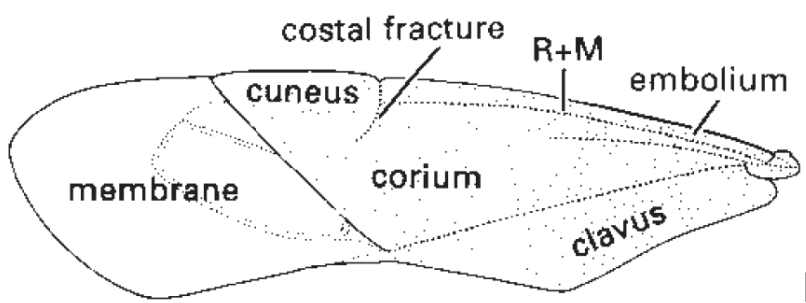
HIND

HETEROPTERA (Reduviidae)



FORE

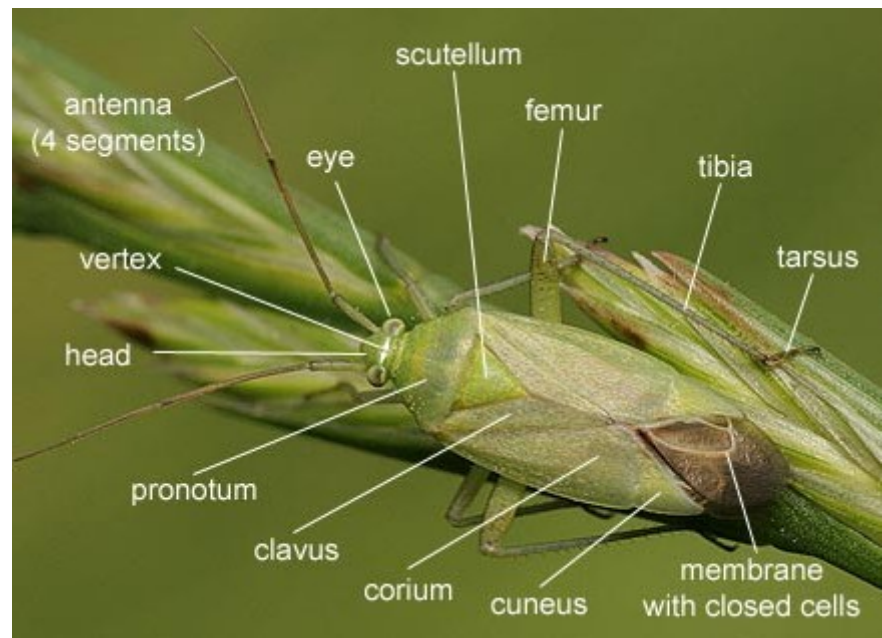
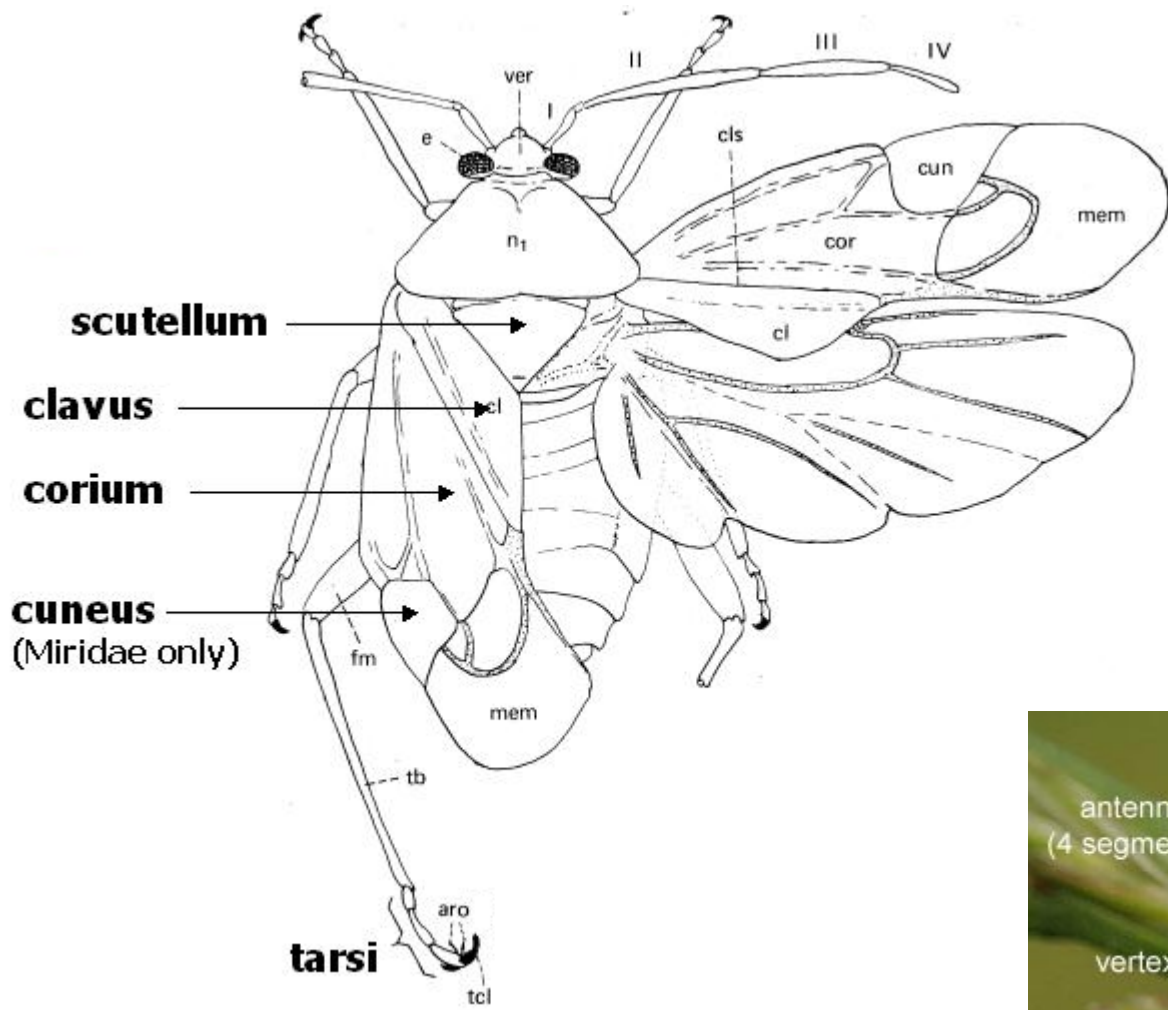
HETEROPTERA (Pentatomidae)



Heteroptera: Miridae

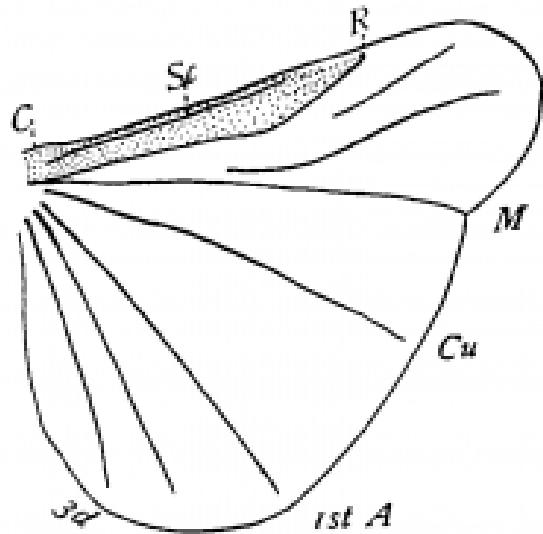
# Heteroptera: Hemiptera

Polokrovky (hemielytra)





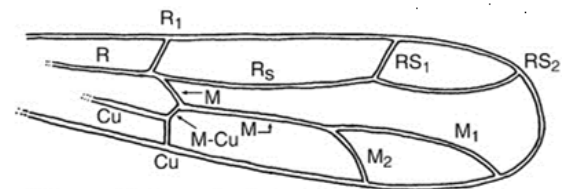
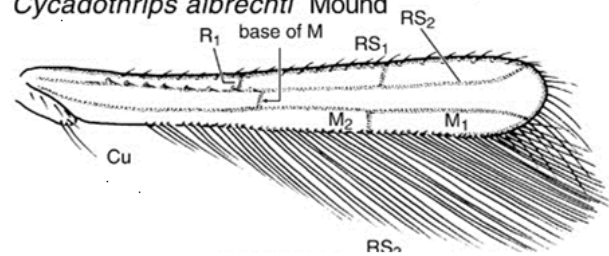
# Strepsiptera (Řásnokřídlí)



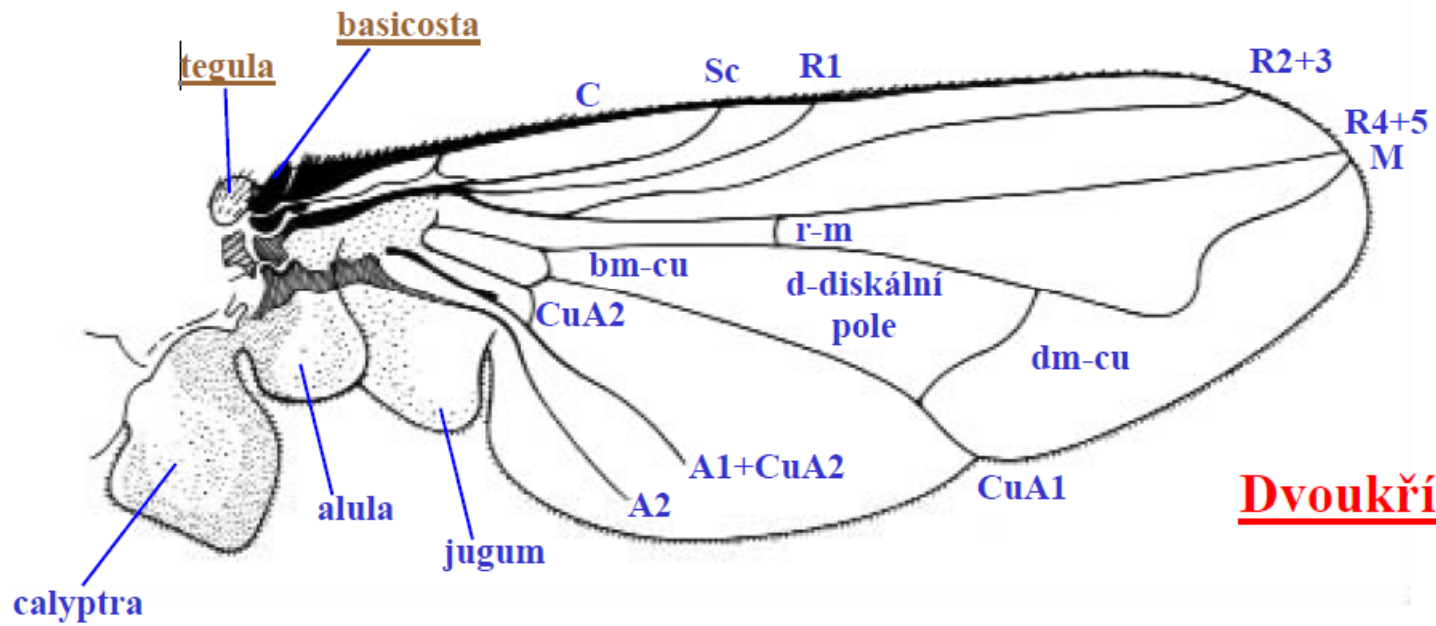
# Thysanoptera (Třásnokřídlí)



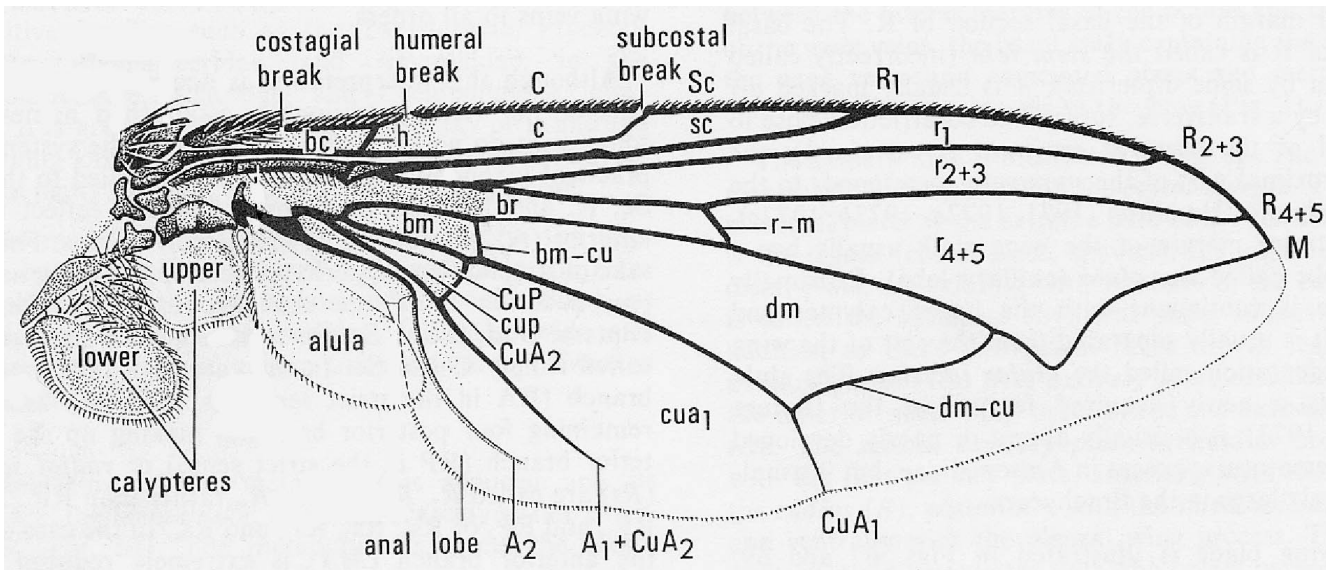
*Cycadothrips albrechti* Mound

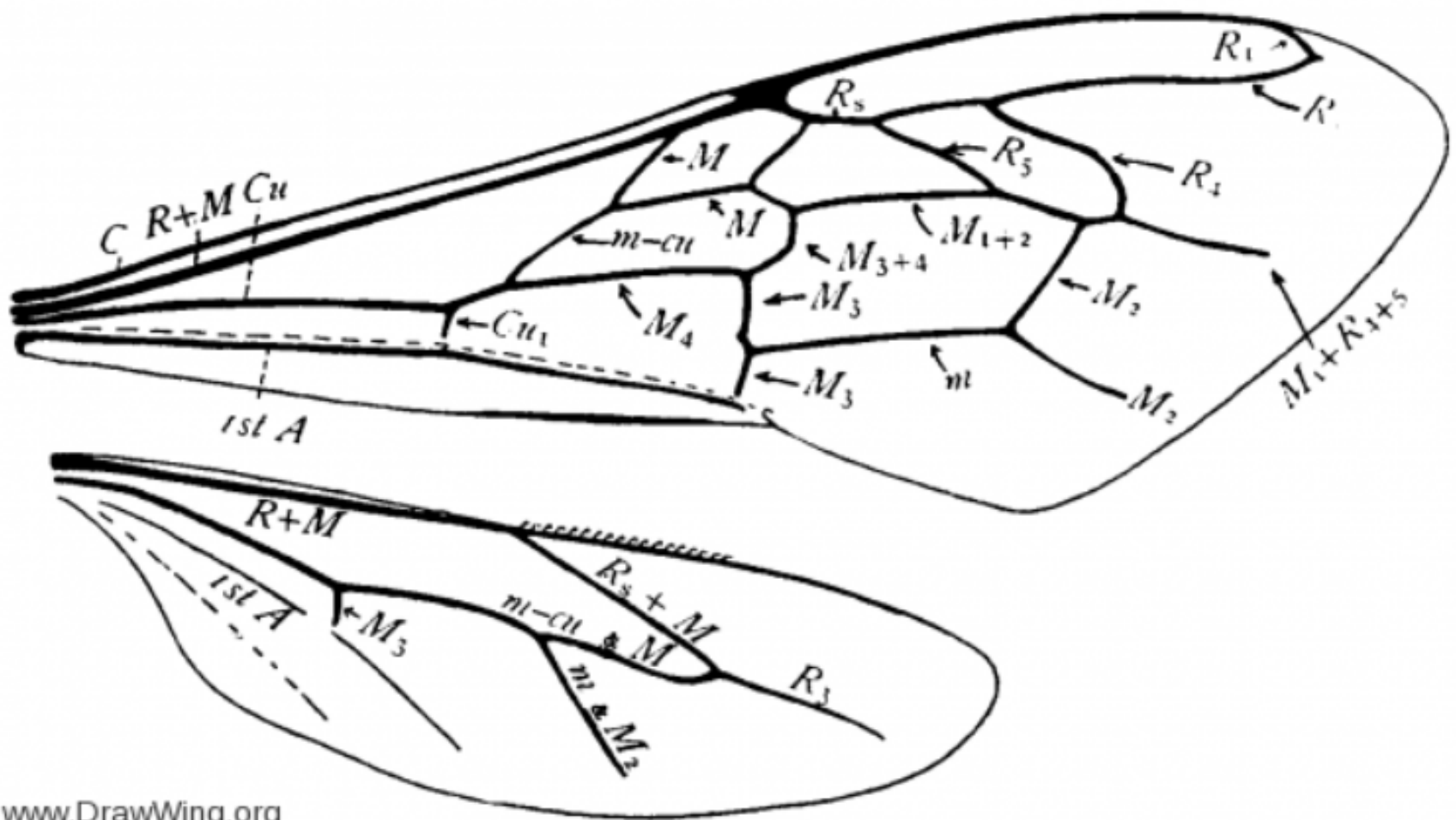


*Triassothrips virginicus*, n.sp.



## Dvoukřídli



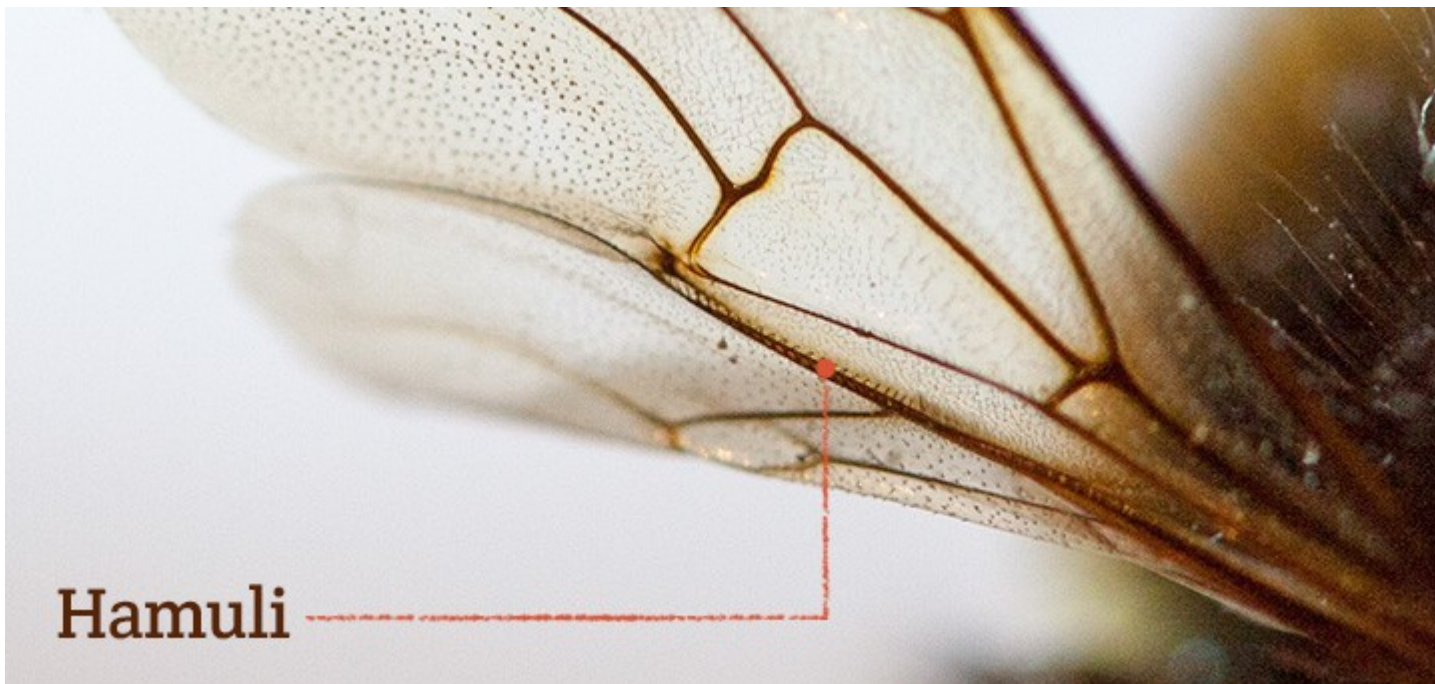
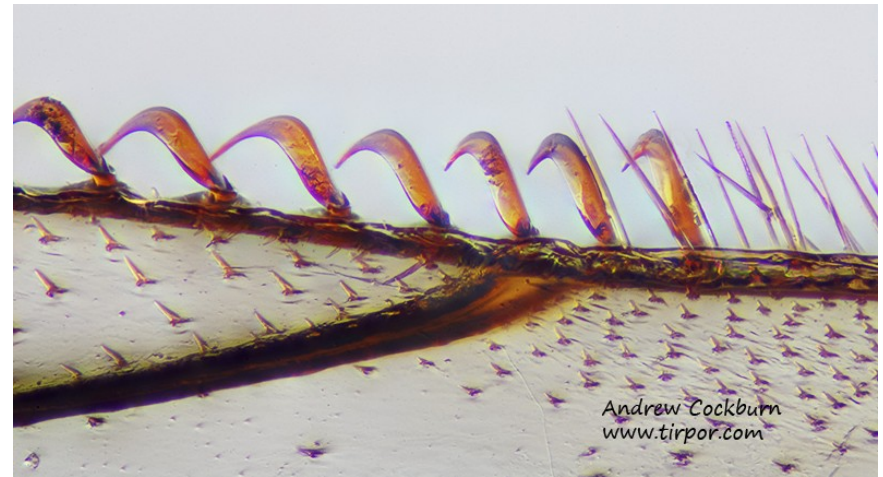
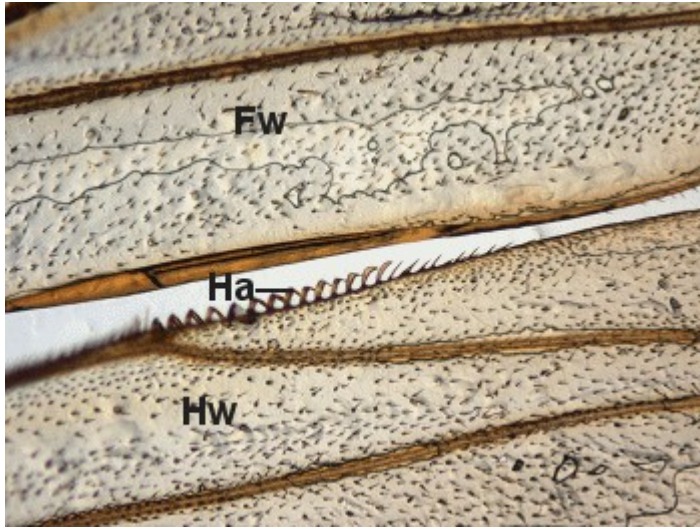


www.DrawWing.org

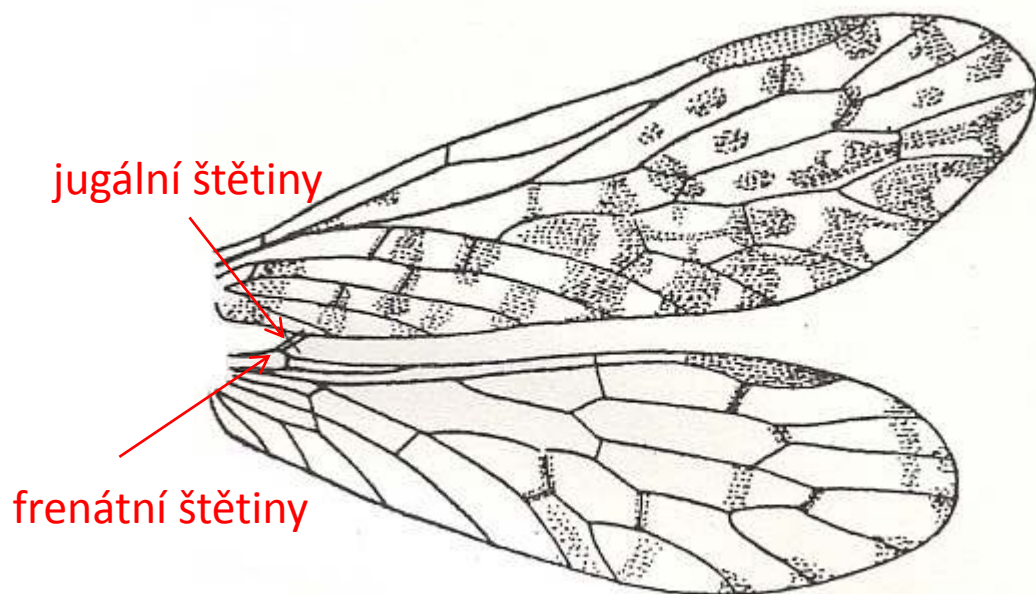
Wings of honey bee *Apis mellifera*. From Comstock (fig. 387) [1].



# Hamulární spojení křídel - Hymenoptera



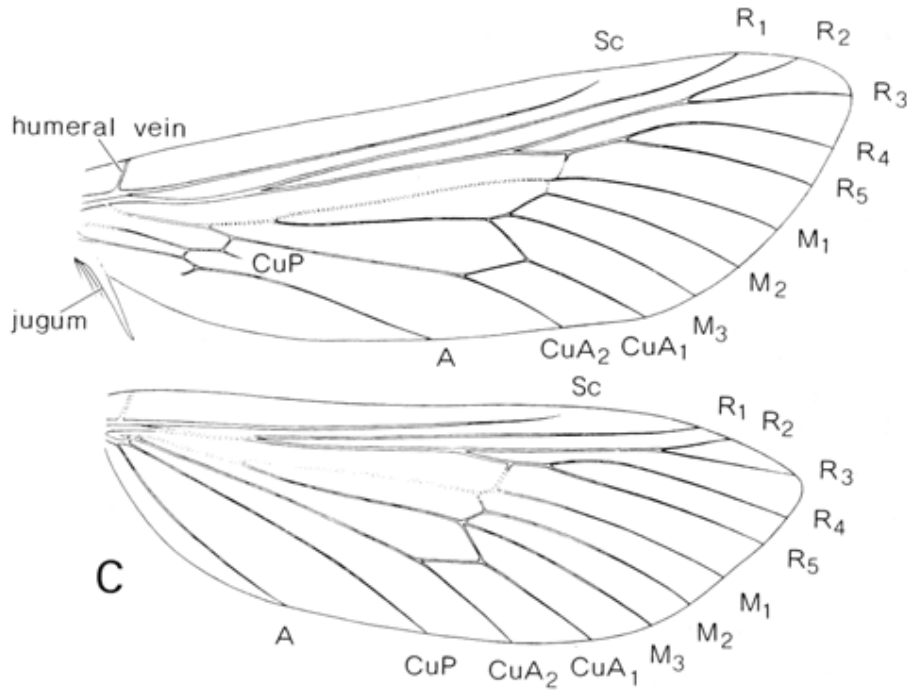
# Mecopteroidní spojení křídel - Mecoptera



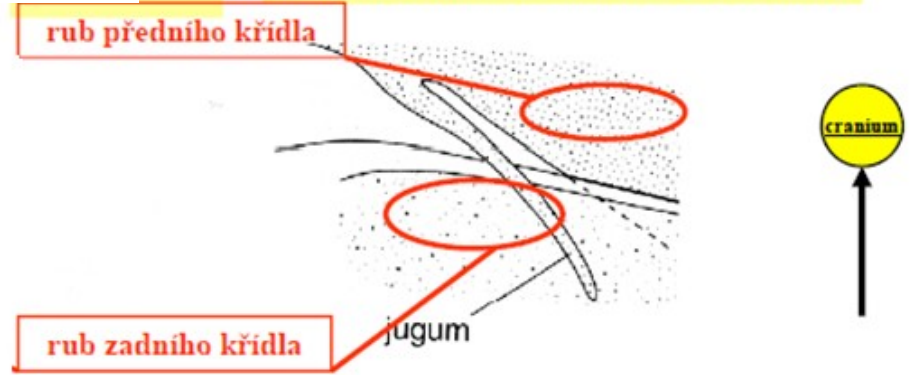


# Jugátní spojení křídel - Lepidoptera

- jugální lalůček předního křídla nadzvedává zadní křídlo



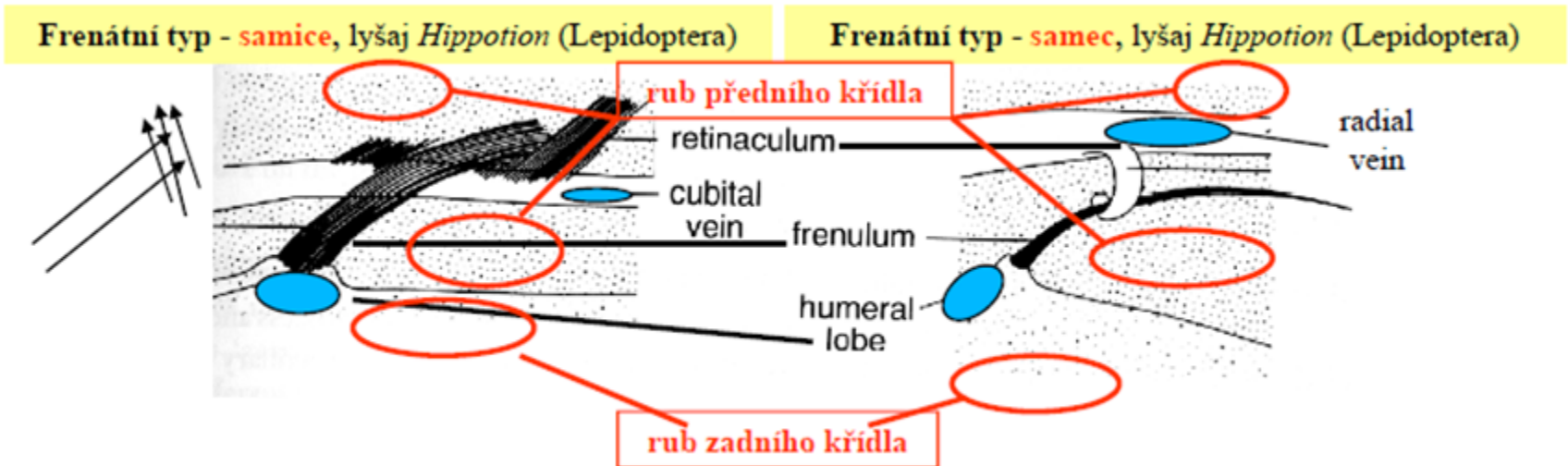
Jugátní typ, můra *Charagia* (Lepidoptera)





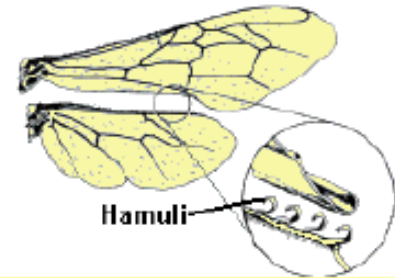
# Frenátní spojení křídel – Lepidoptera: Sphingidae

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



# 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)

