



Bi 6760
**Základy entomologie
cvičení**

2014

Igor Malenovský



evropský
sociální
fond v ČR



EVROPSKÁ UNIE



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY

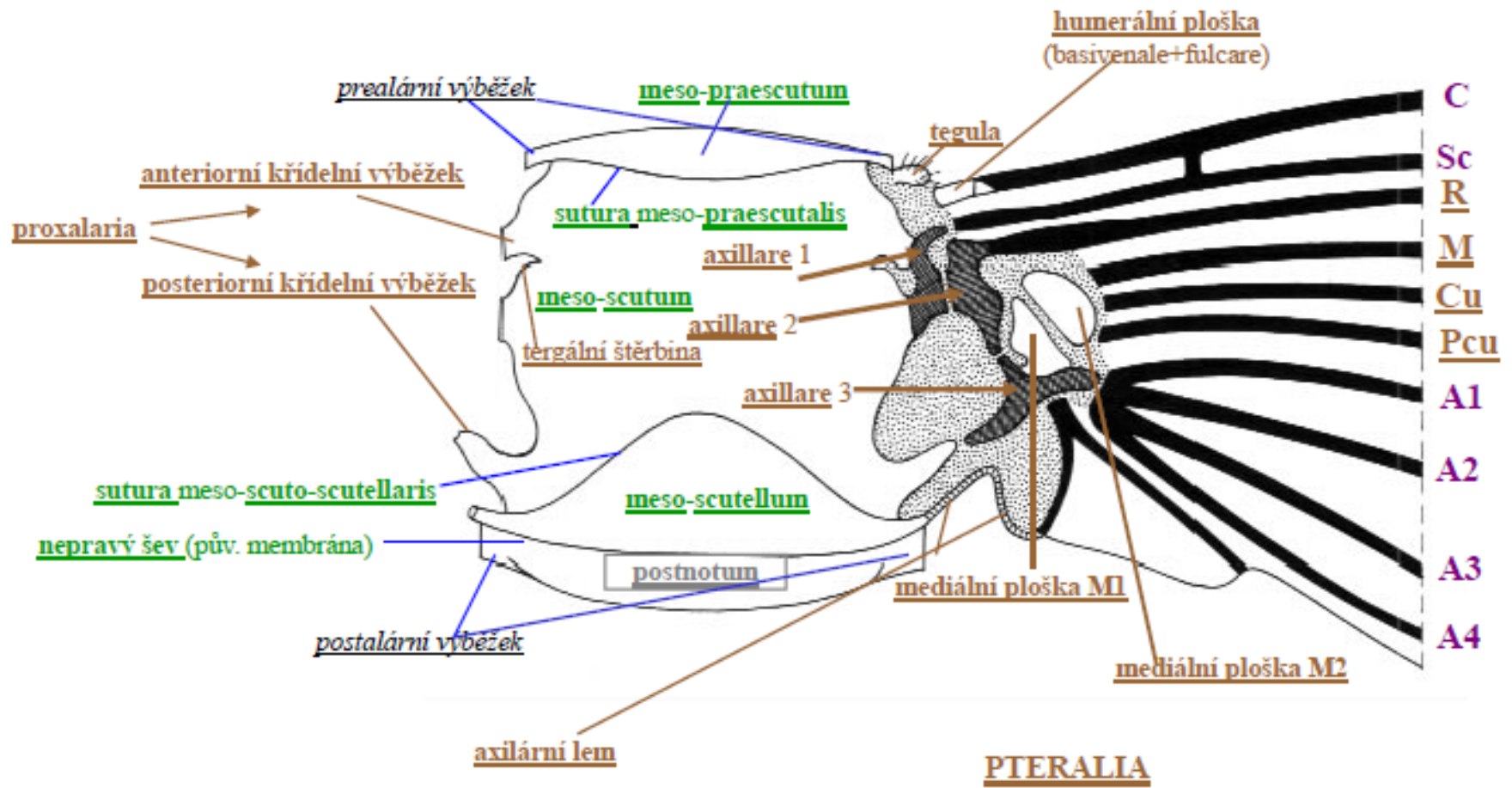


OP Vzdělávání
pro konkurenceschopnost

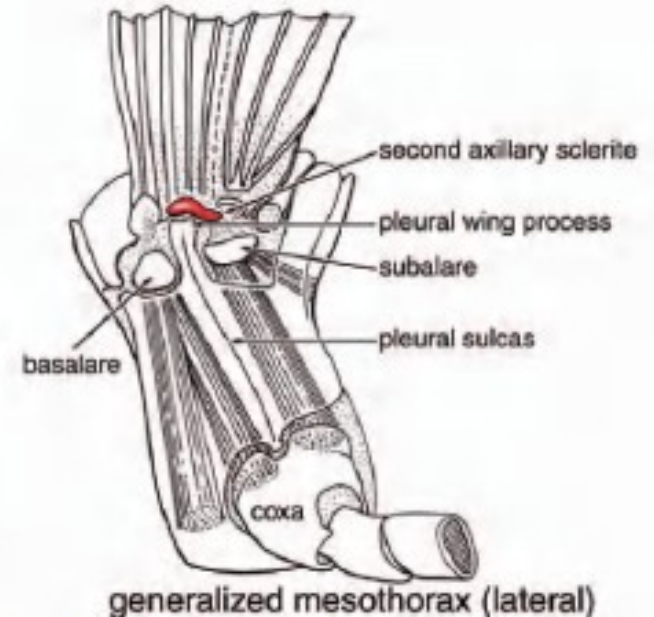
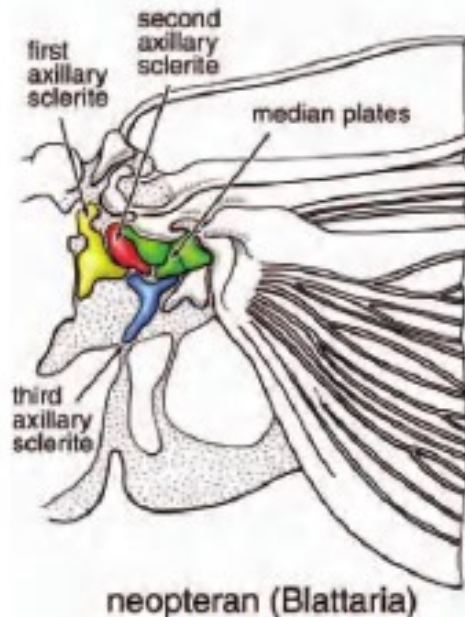
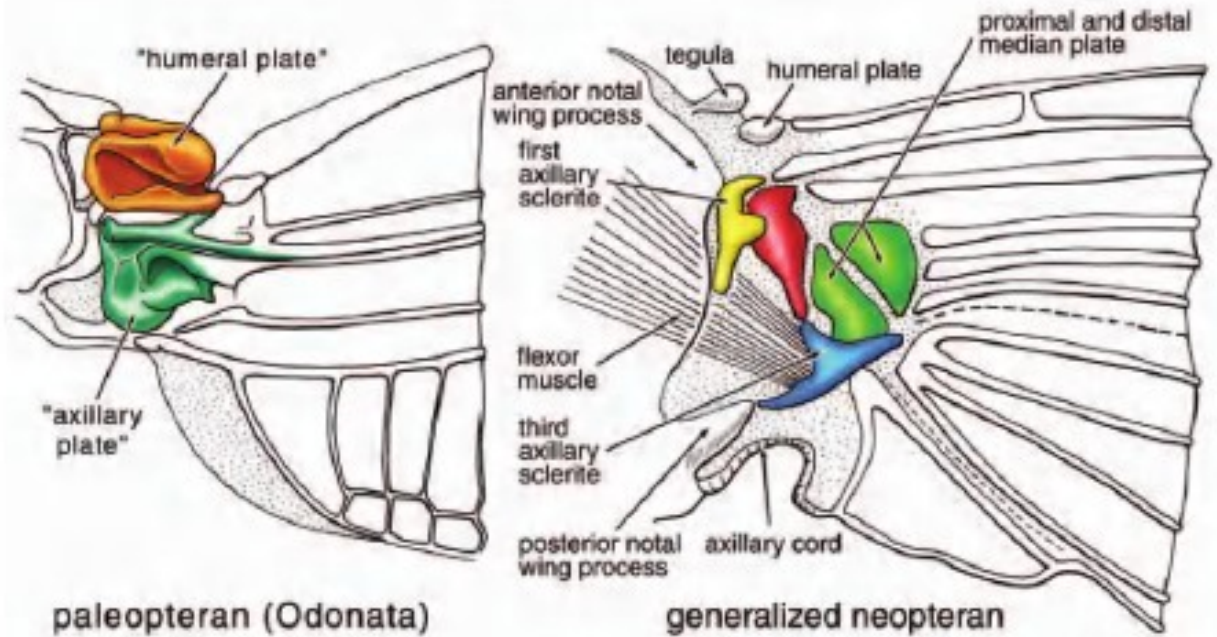


INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Pterothorax a zakloubení křídla - dorzální pohled na mesothorax



Struktura báze křídla: bazální sklerity



Grimaldi & Engel 2005

4.6. Major types of wing articulation in Ephemeroptera, Odonata, and Neoptera.

Struktura báze křídla: bazální sklerity (zadní křídlo švába)

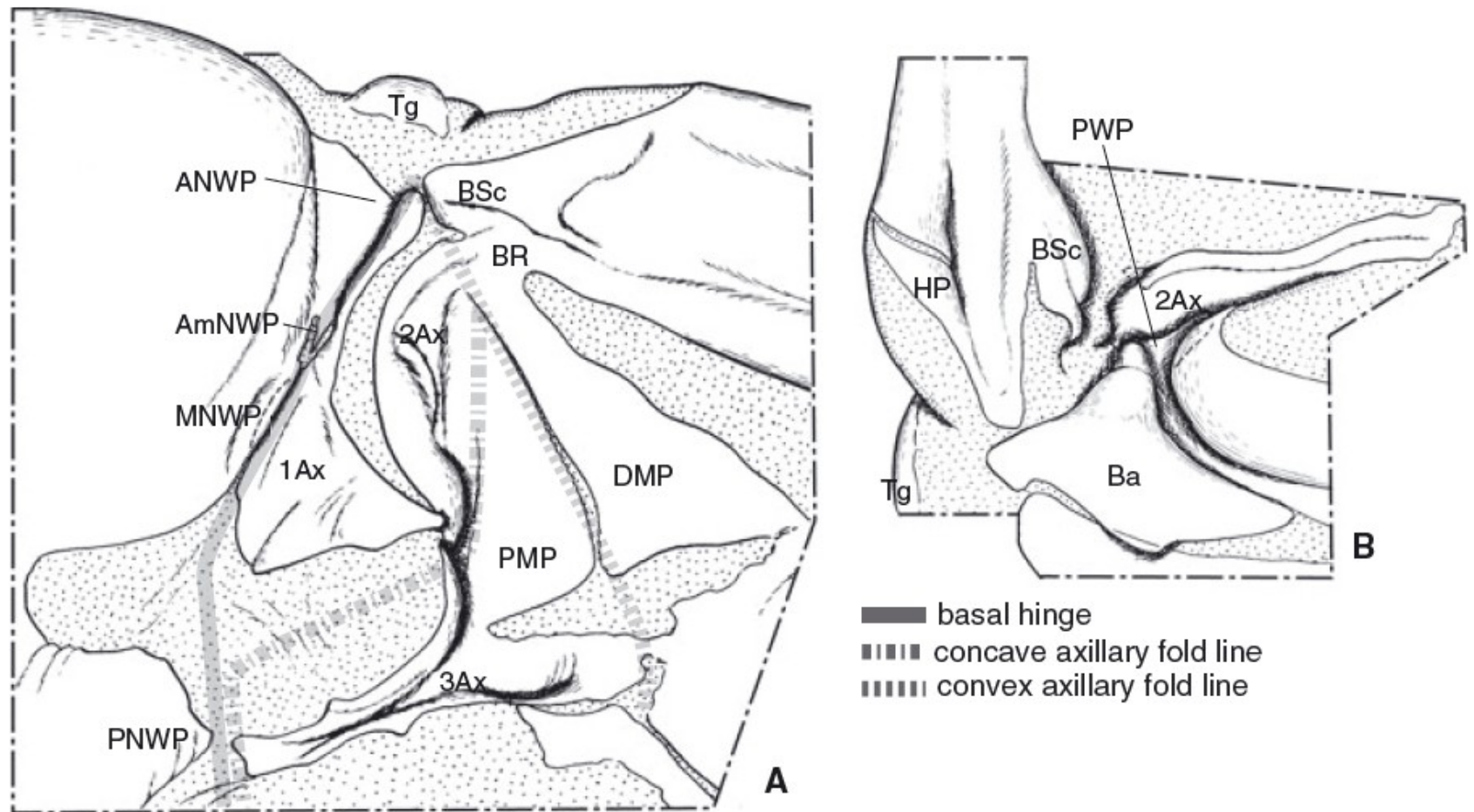
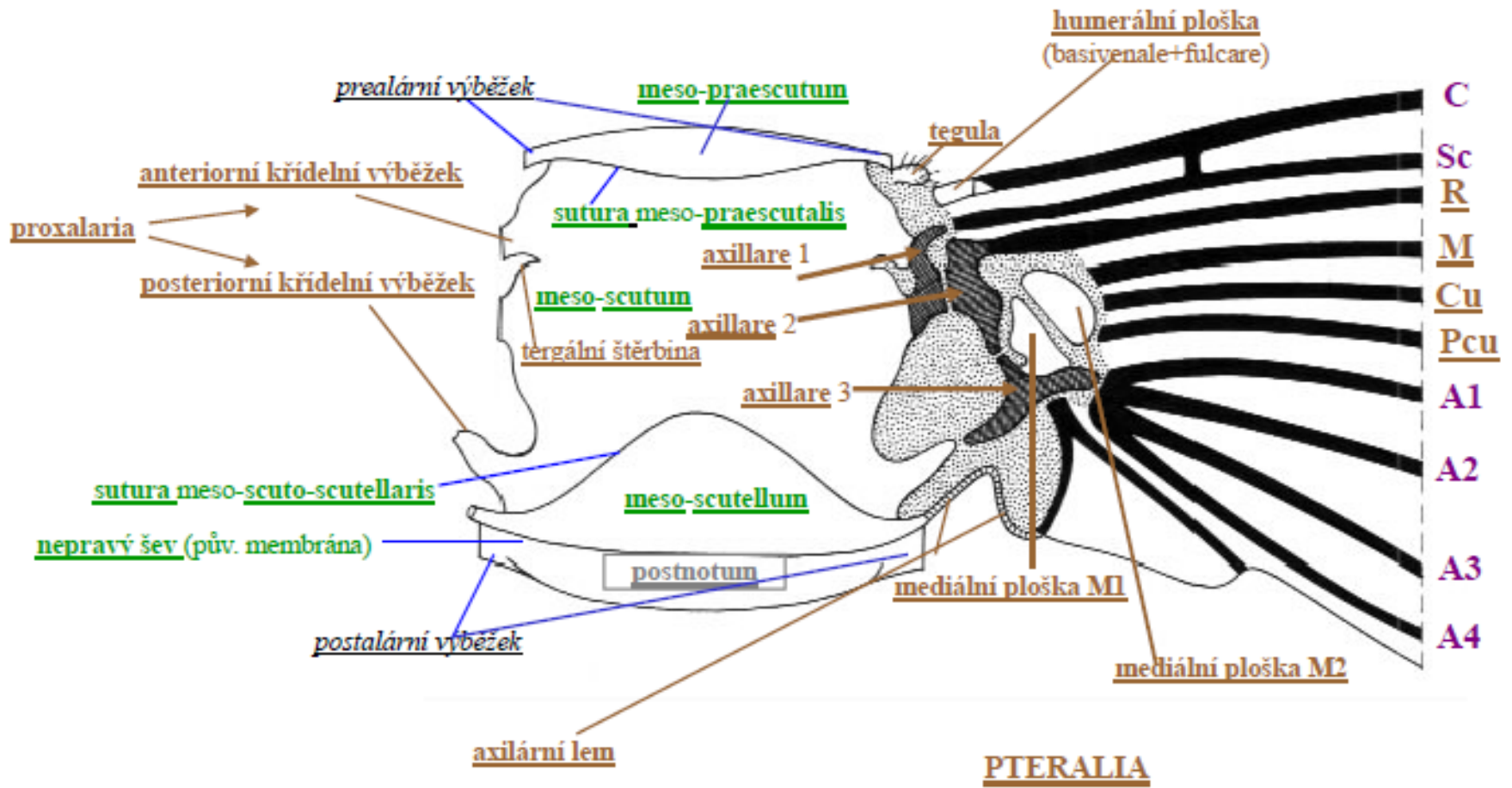


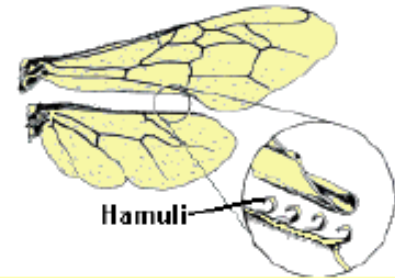
Fig. 3. The hindwing base of *Eucorydia yasumatsui* (Blattodea), showing dorsal (A) and ventral (B) structures.

Pterothorax a zakloubení křídla - dorzální pohled na mesothorax



Spojení křídel

Pohled z ventrální strany křídel



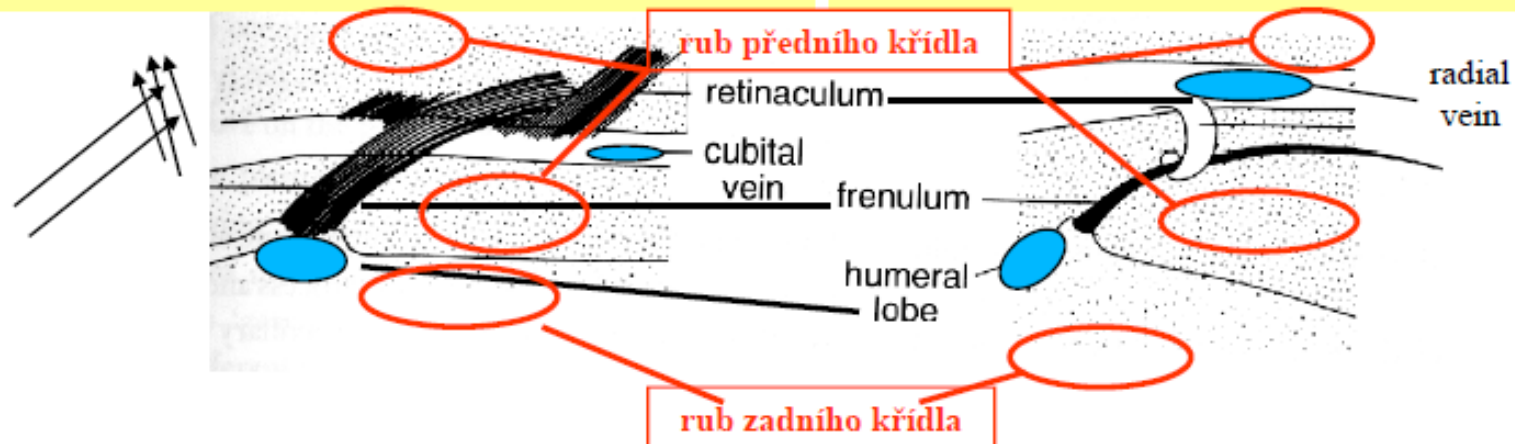
Primitivní mecopteroidní typ (*Taeniochorista*, Mecoptera)

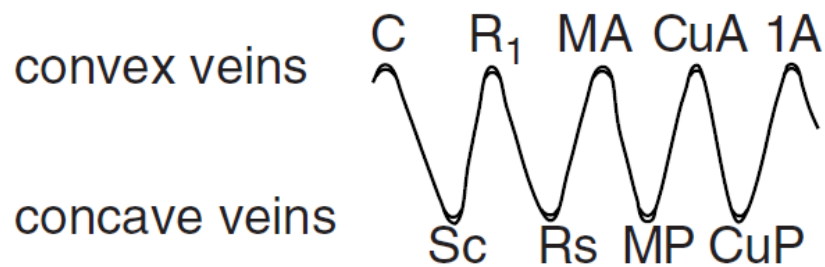
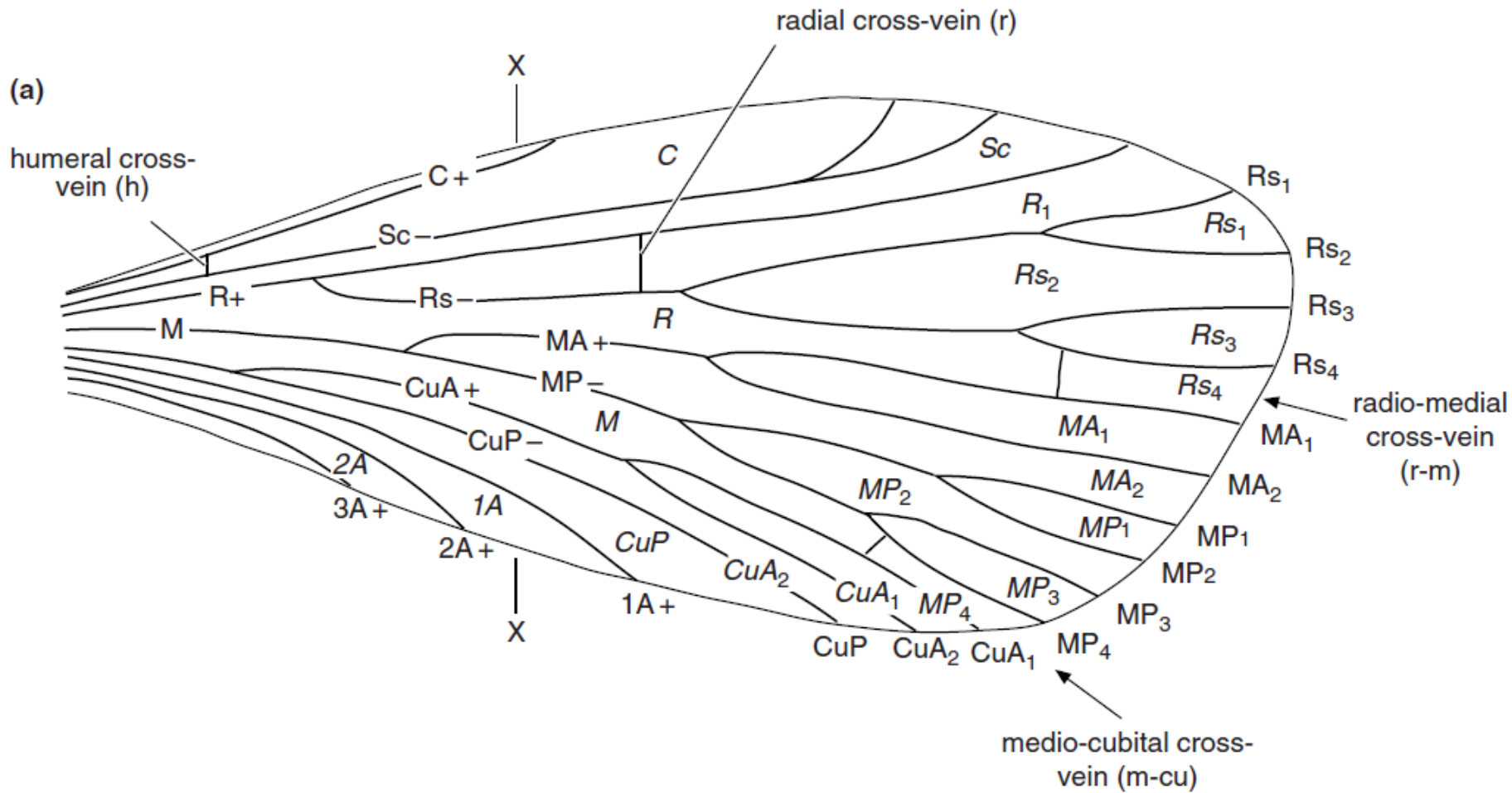
Jugátní typ, můra *Charagia* (Lepidoptera)



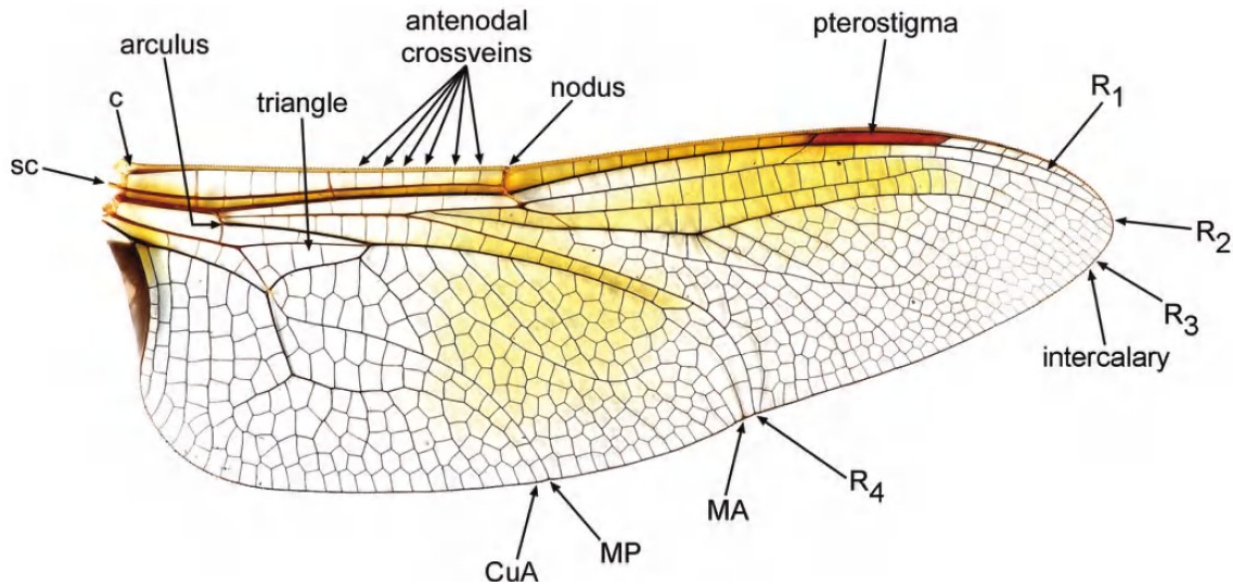
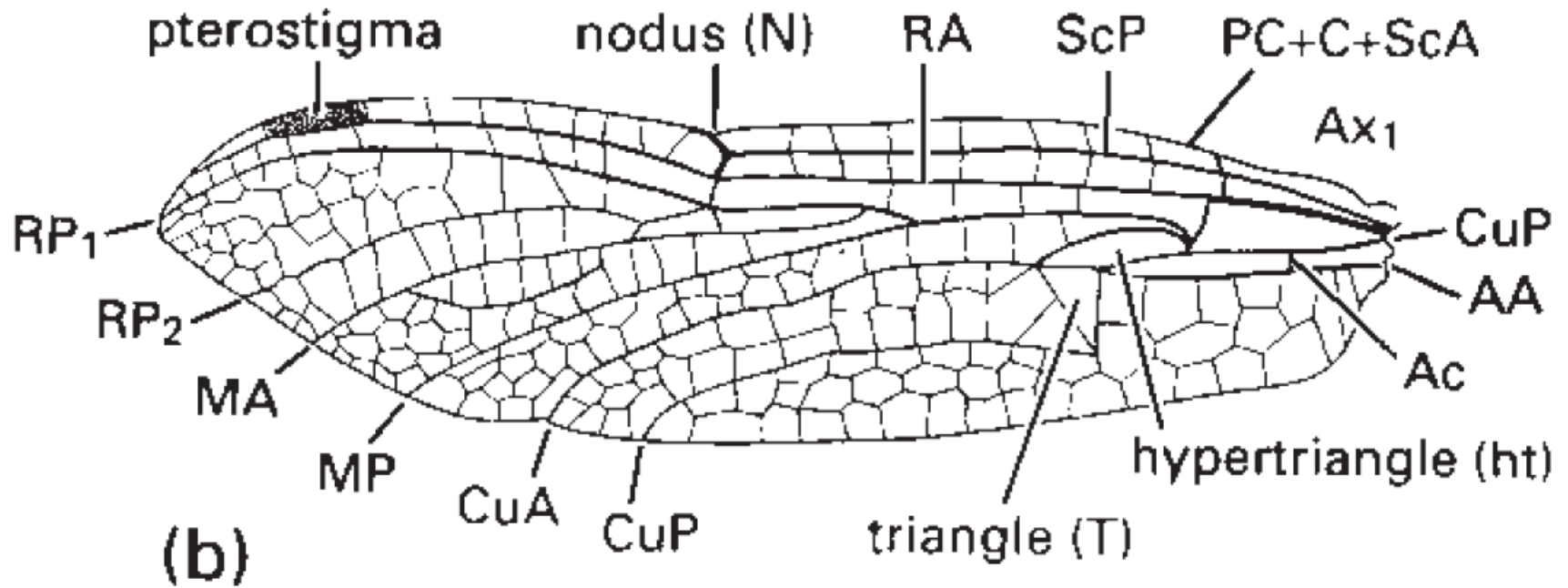
Frenátní typ - samice, lyšaj *Hippotion* (Lepidoptera)

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

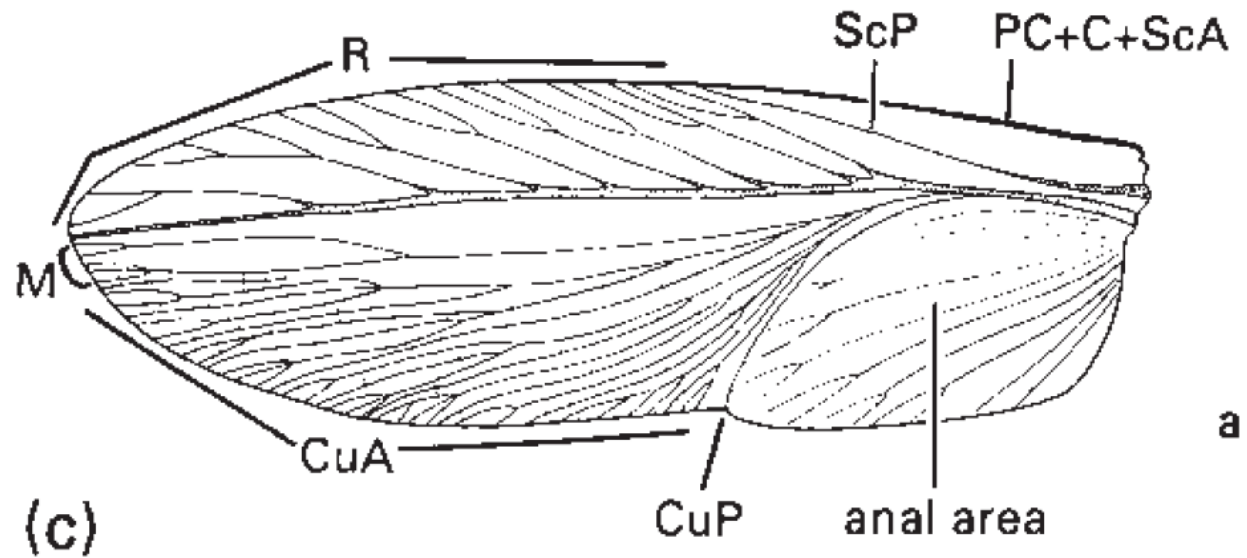
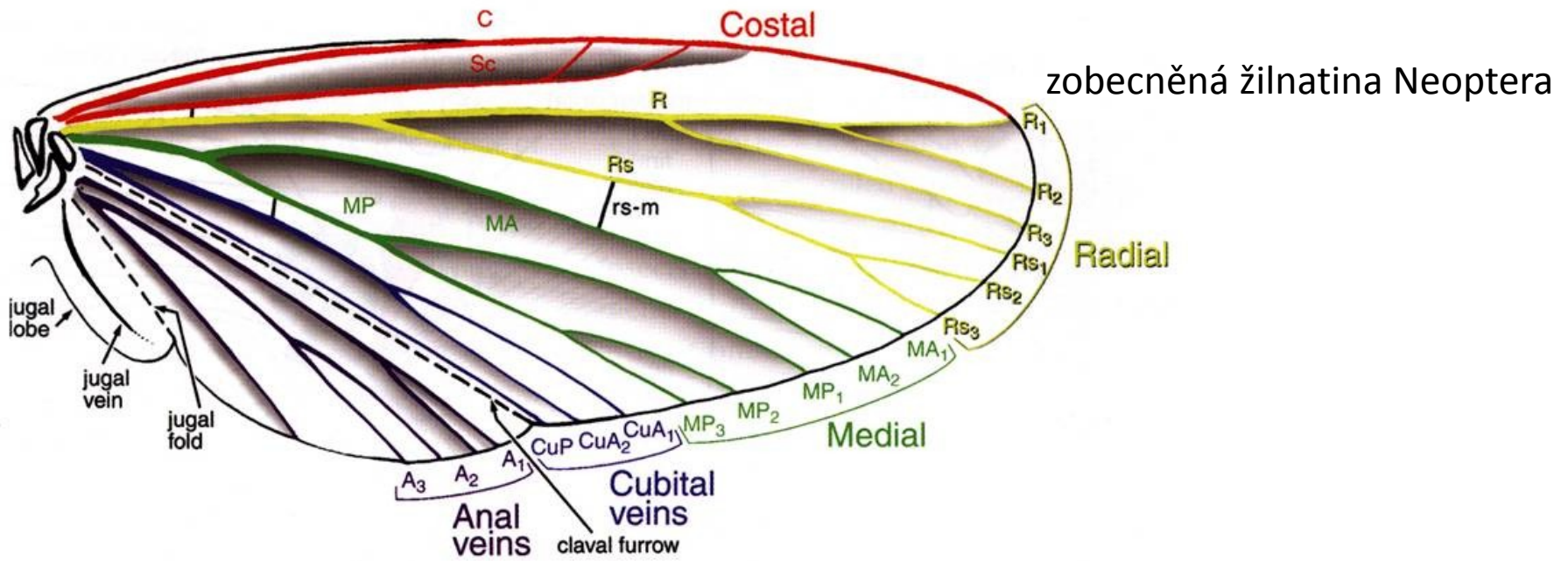


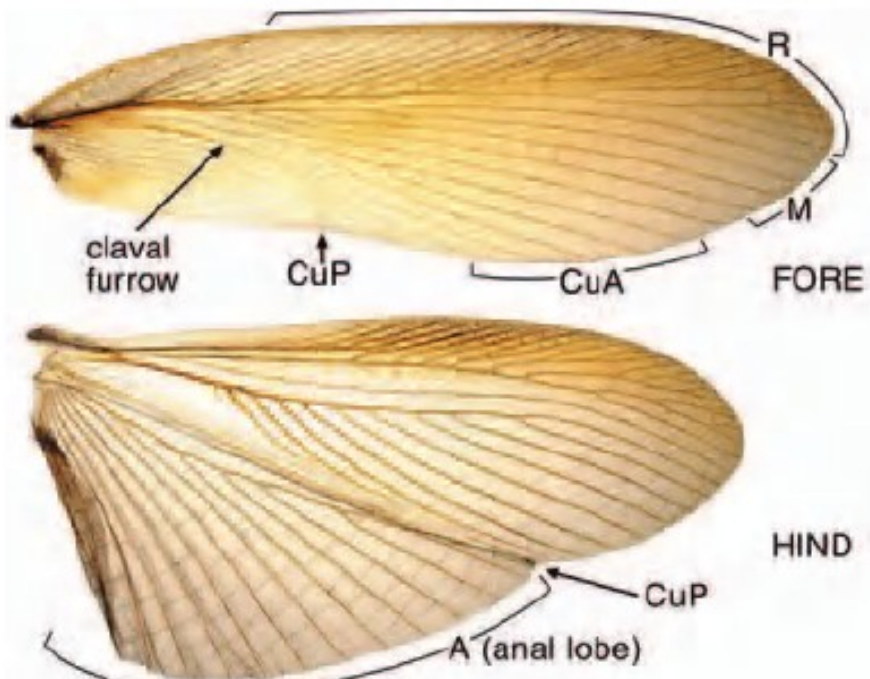


Žilnatina křídla vážky (Odonata)

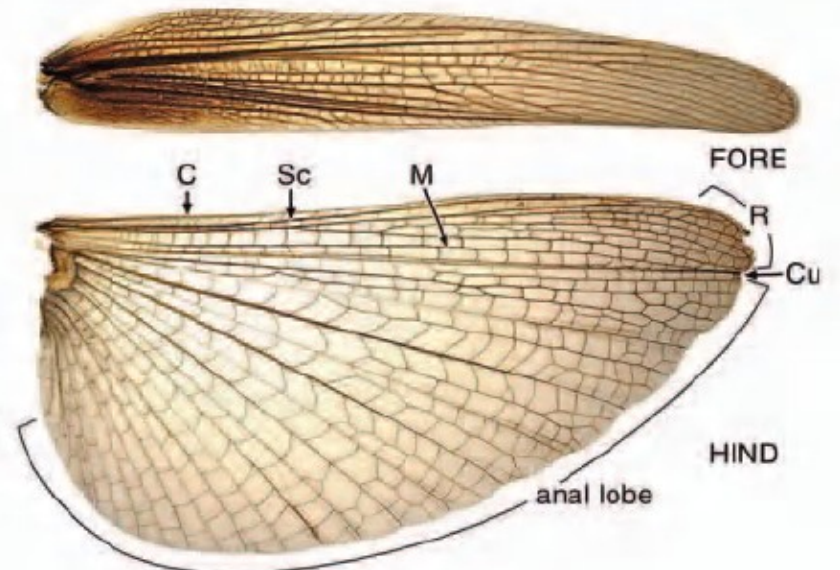


Žilnatina křídla švába (Blattodea)

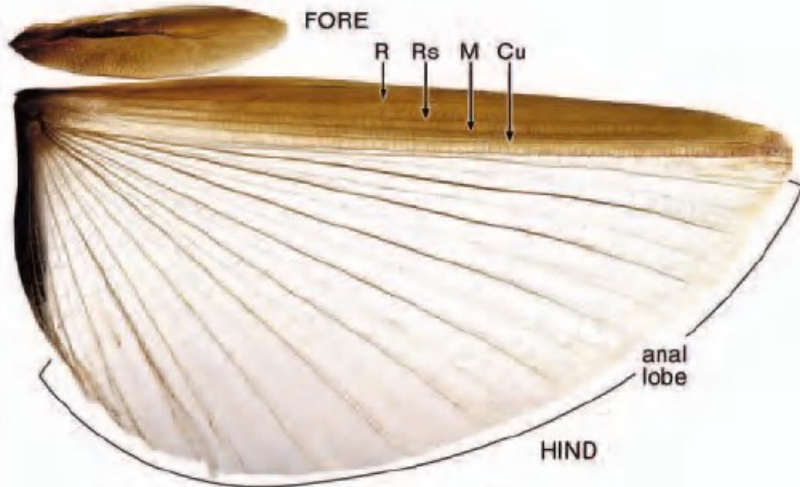




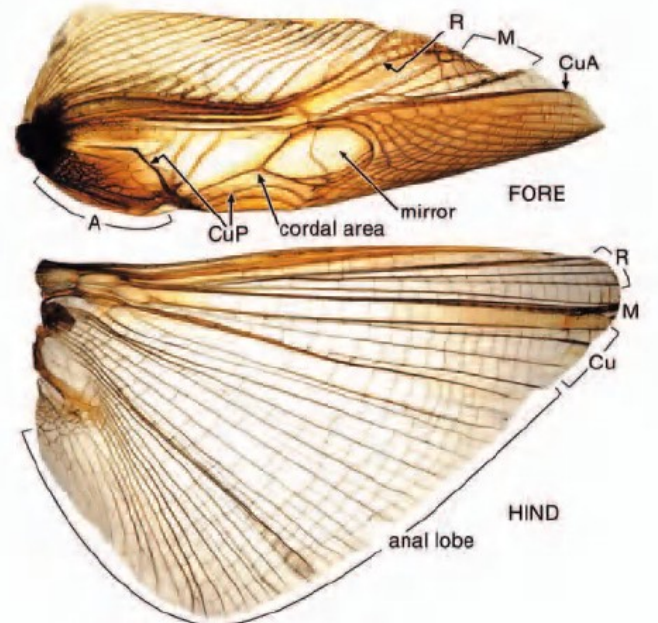
BLATTARIA



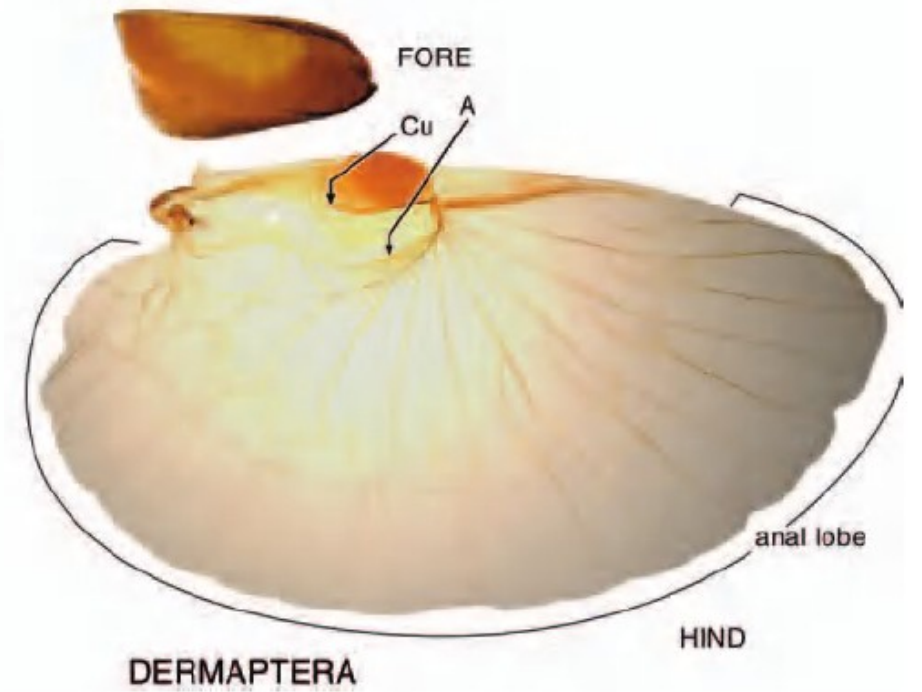
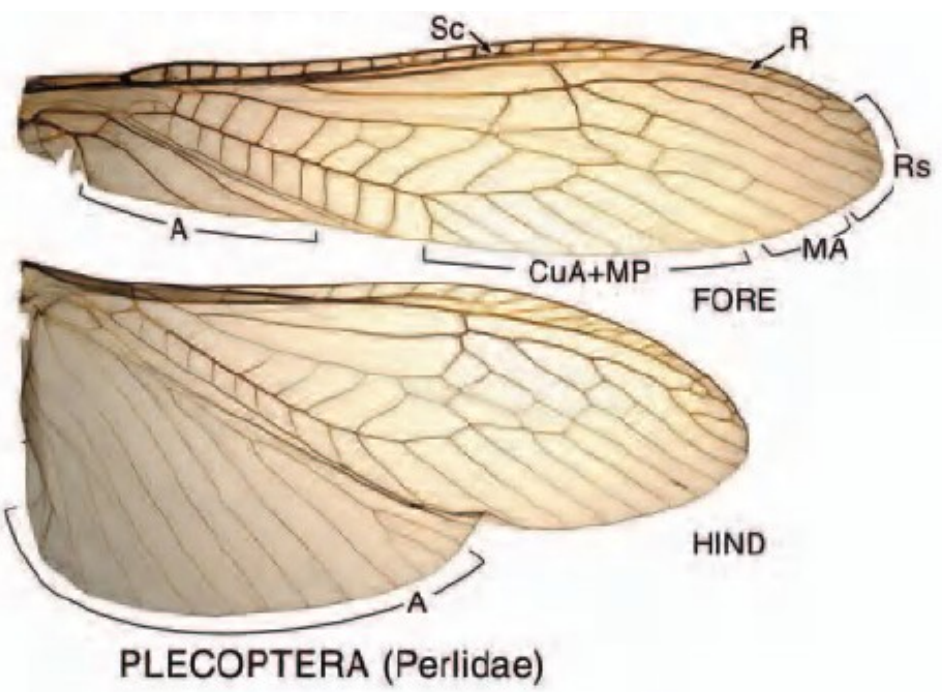
ORTHOPTERA (Acrididae)

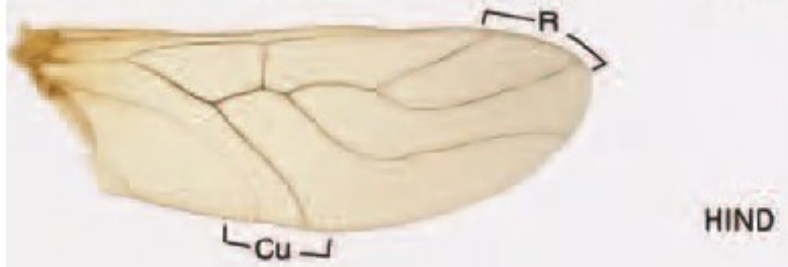
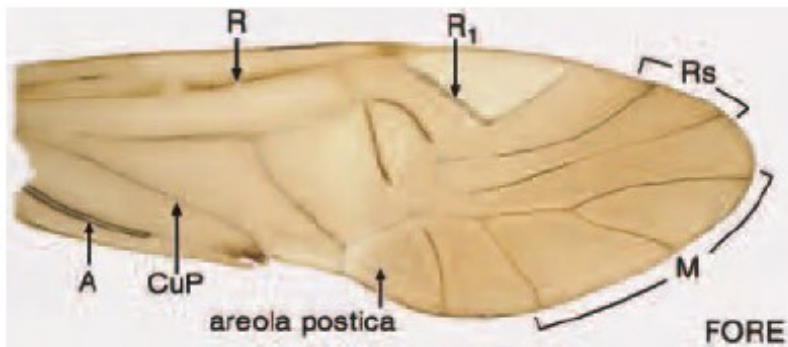


PHASMATODEA (Phasmatidae)

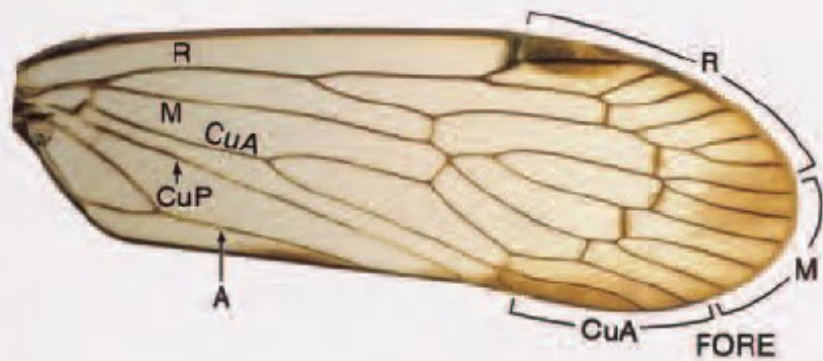


ORTHOPTERA (Gryllidae)

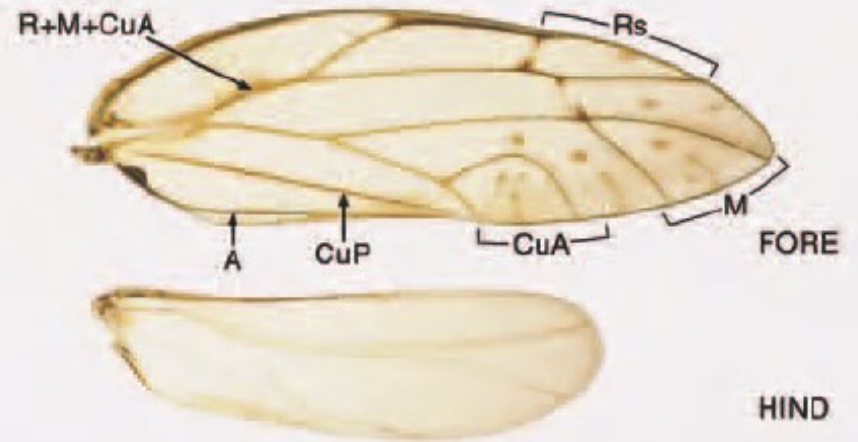




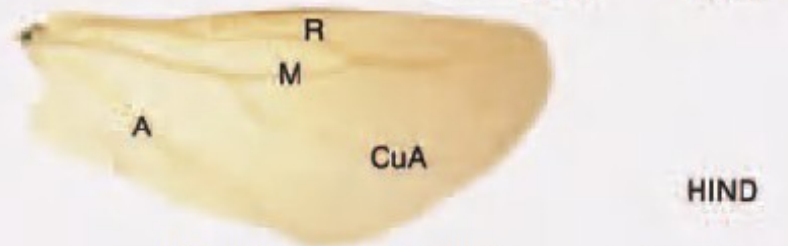
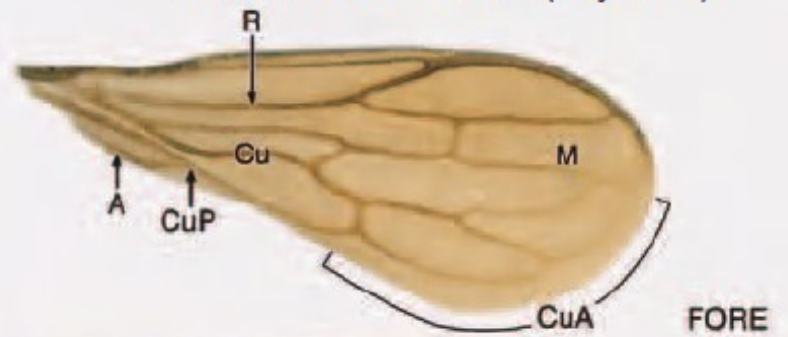
PSOCOPTERA



AUCHENORRHYNCHA (Cixiidae)



STERNORRHYNCHA (Psyllidae)



HETEROPTERA (Enicocephalidae)



FORE

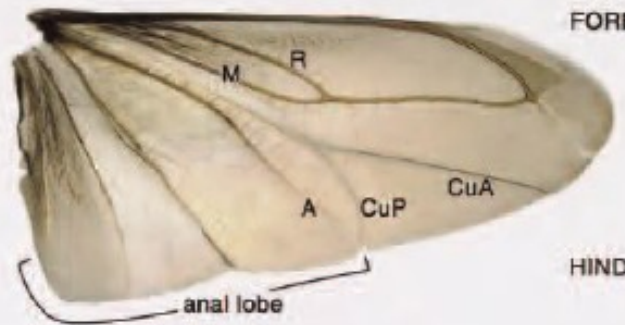


HIND

HETEROPTERA (Gerridae)

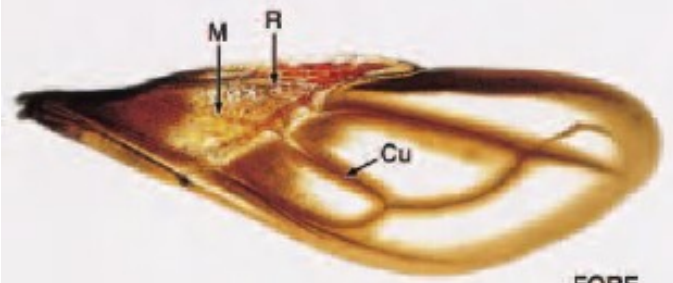


FORE



HIND

HETEROPTERA (Belostomatidae)

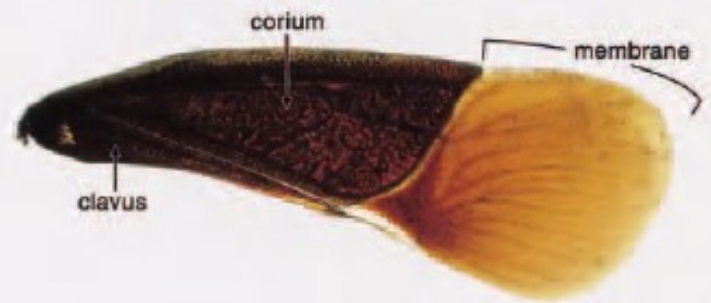


FORE



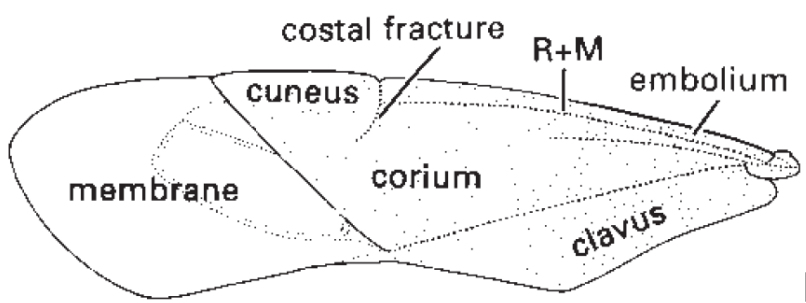
HIND

HETEROPTERA (Reduviidae)

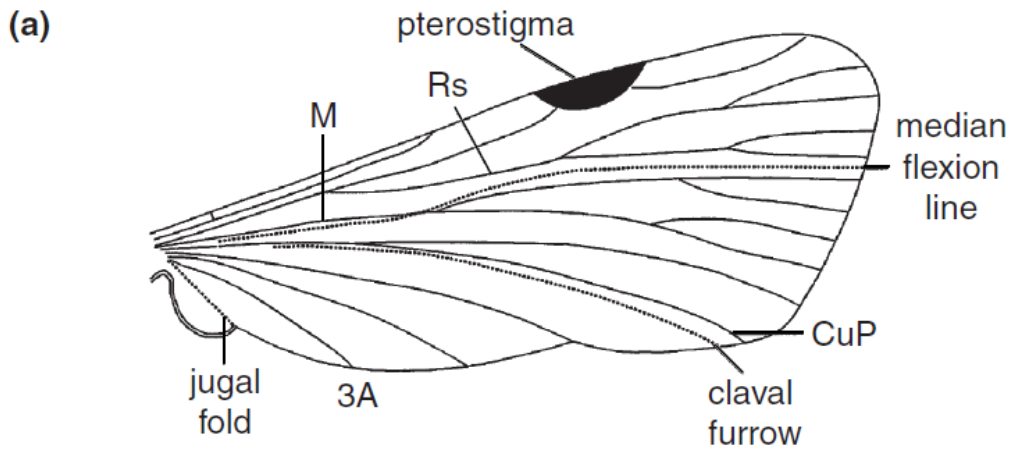


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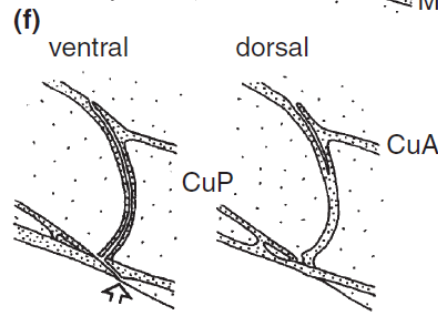
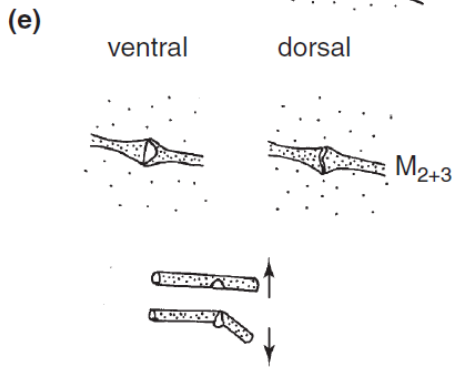
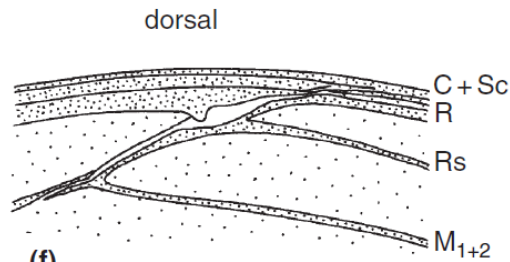
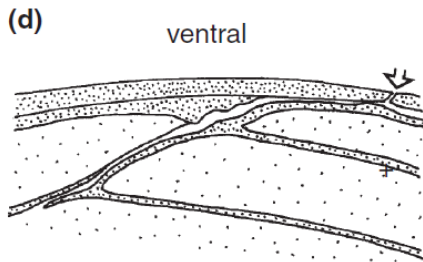
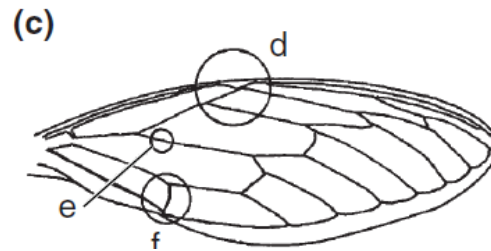
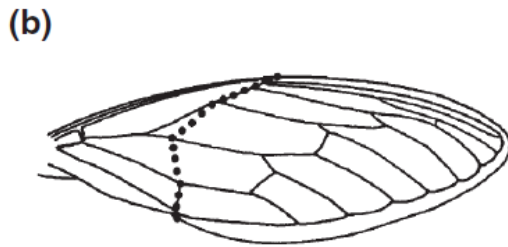
HETEROPTERA (Pentatomidae)



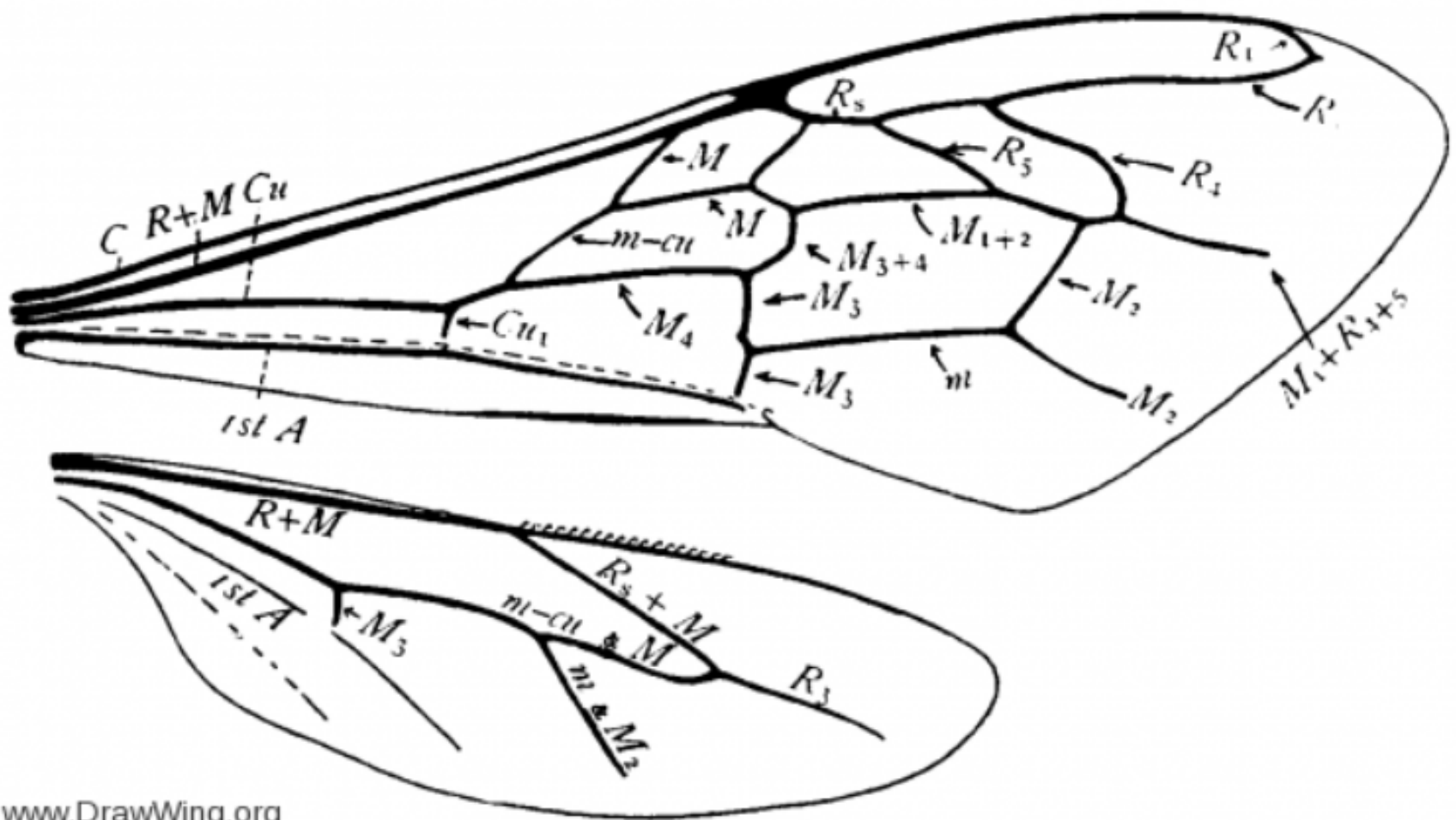
Heteroptera: Miridae



Sklady a ohyby křídla, zlomy žilek

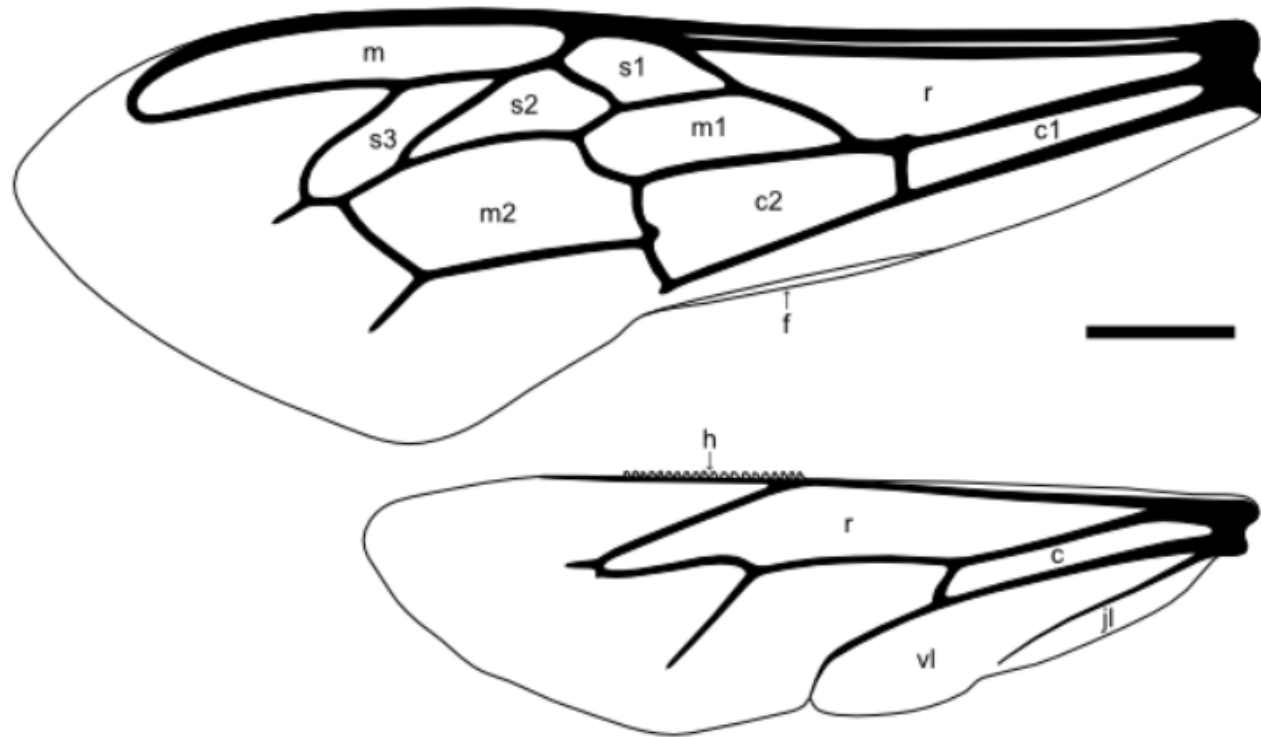


Hemiptera: Cicadidae



www.DrawWing.org

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



© Adam Tofilski - www.honeybee.drawing.org

Fore wing (upper) and hind wing (lower) of honey bee worker. Terminology based on Michener (2000) [1]. (scale bar = 1 mm)

- c - cubital cell
- c1 - first cubital cell
- c2 - second cubital cell
- f - fold on posterior margin of fore wing
- h - hooks (hamuli) on anterior margin of hind wing
- jl - jugal lobe
- m - marginal cell
- m1 - first medial cell
- m2 - second medial cell
- r - radial cell
- s1 - first submarginal cell
- s2 - second submarginal cell
- s3 - third submarginal cell
- vl - vannal lobe

