



Základy entomologie - cvičení

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Navazující předměty

Bi7980 Aplikovaná entomologie

Bi9790 Entomologie pro pokročilé

Bi0055 Terénní cvičení z entomologie

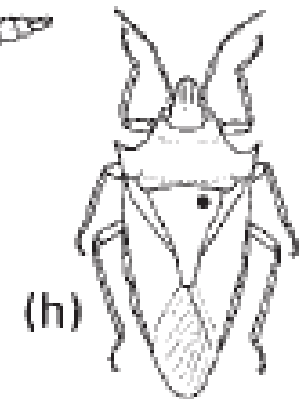
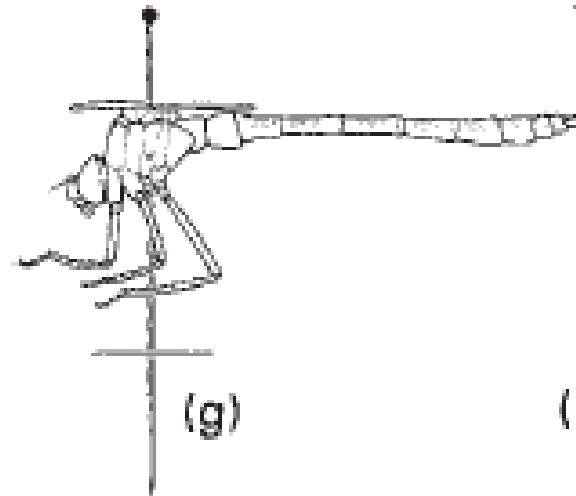
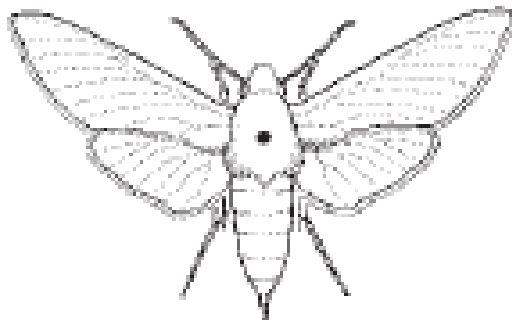
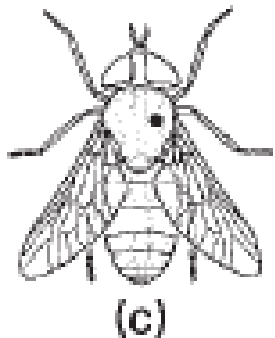
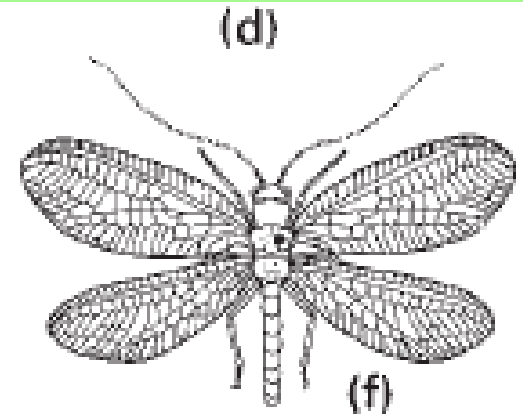
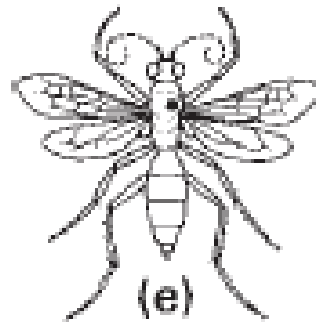
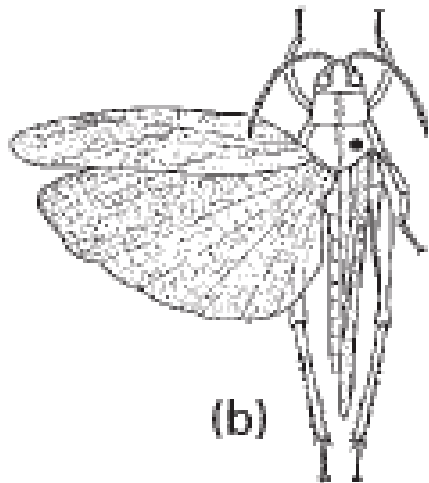
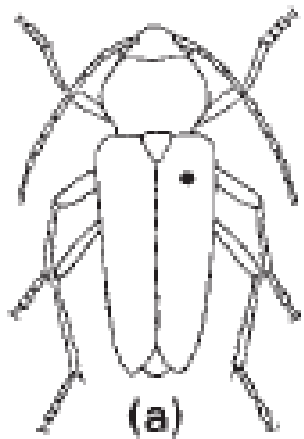
Bi0260 Taxonomie, fylogenetika a zoologická
nomenklatura

Bi8780 Systém a fylogeneze hmyzu

Bi8761 Úvod do terénní zoologie bezobratlých

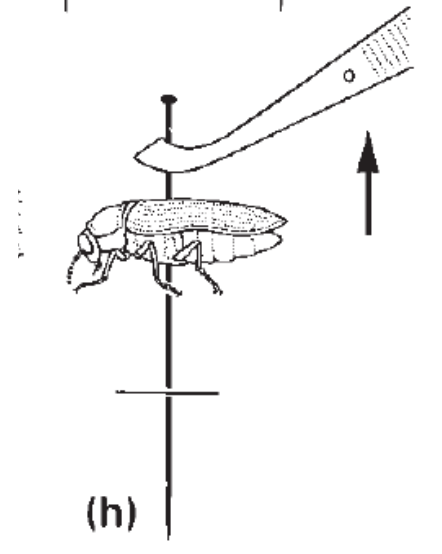
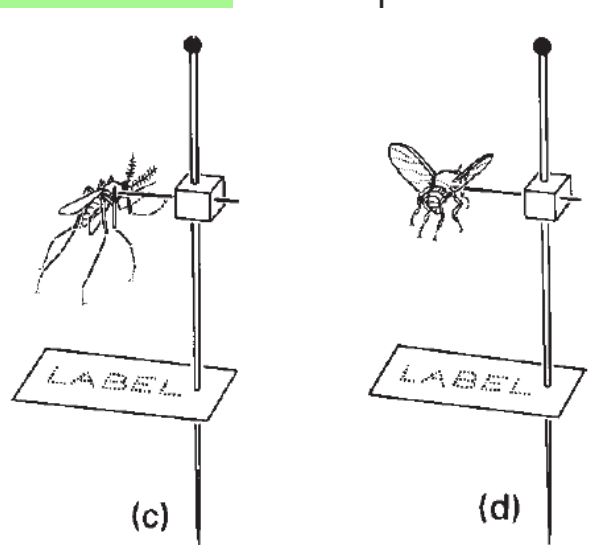
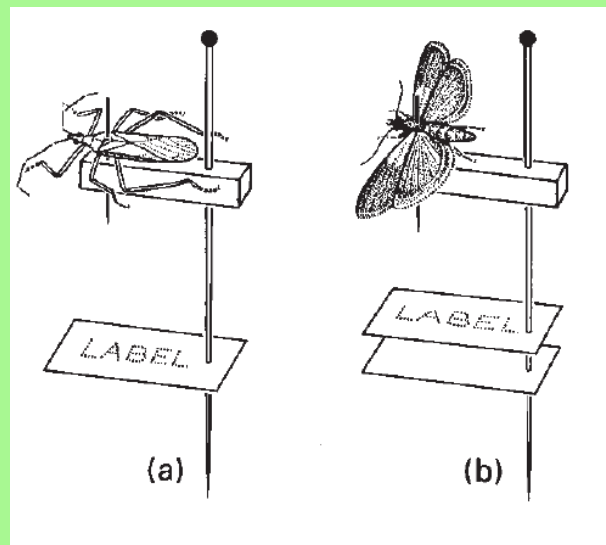
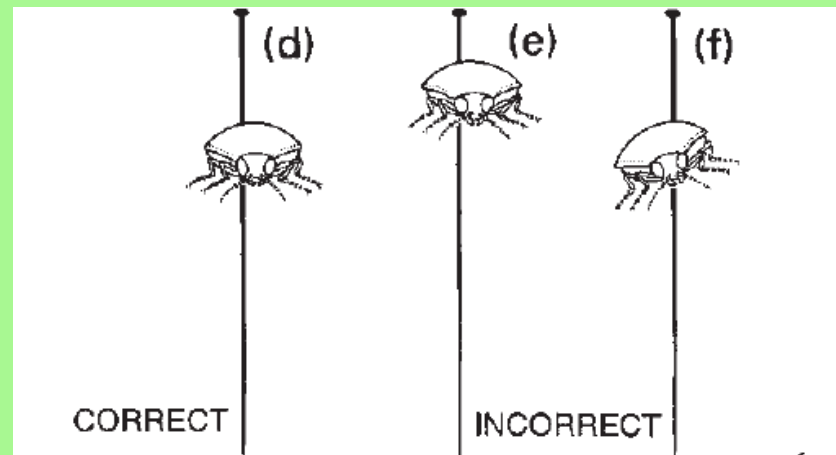
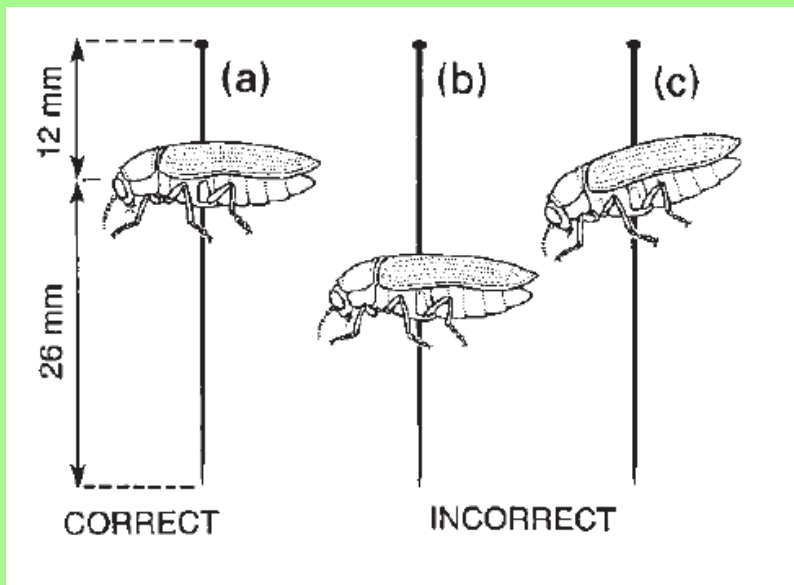
Metody preparace hmyzu

- Suché preparáty



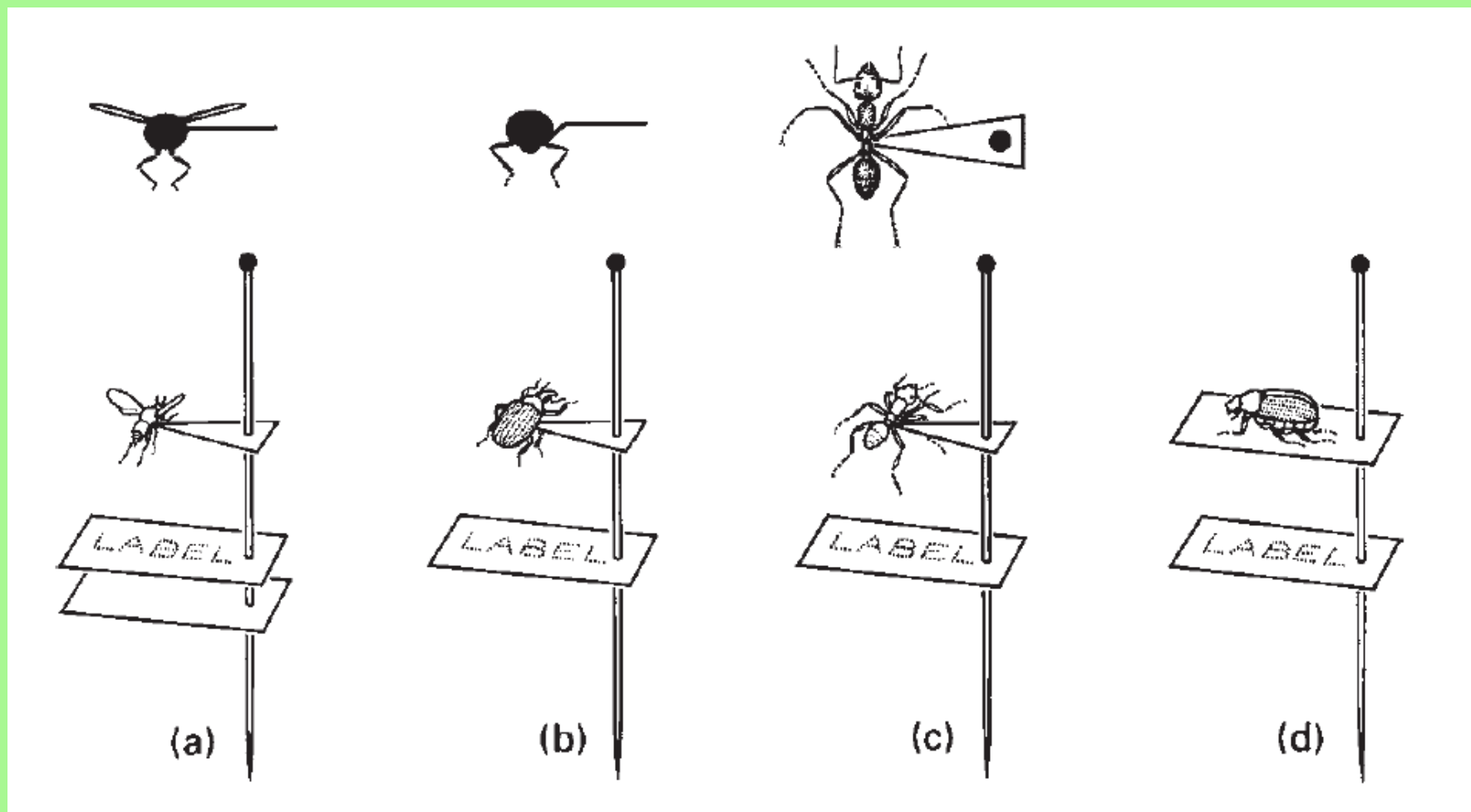
Napíchnutí na entomologický špendlík

Suché preparáty - napíchnutí na entomologický špendlík



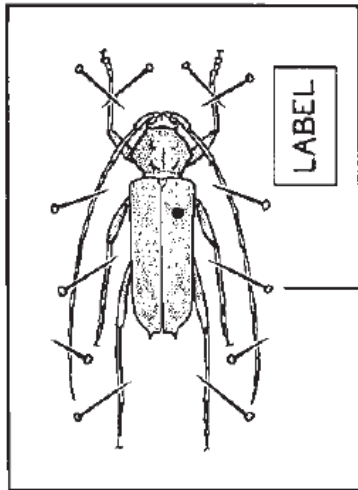
- napíchnutí na minucii

Suché preparáty – nalepení na štítek (např. Herkules)



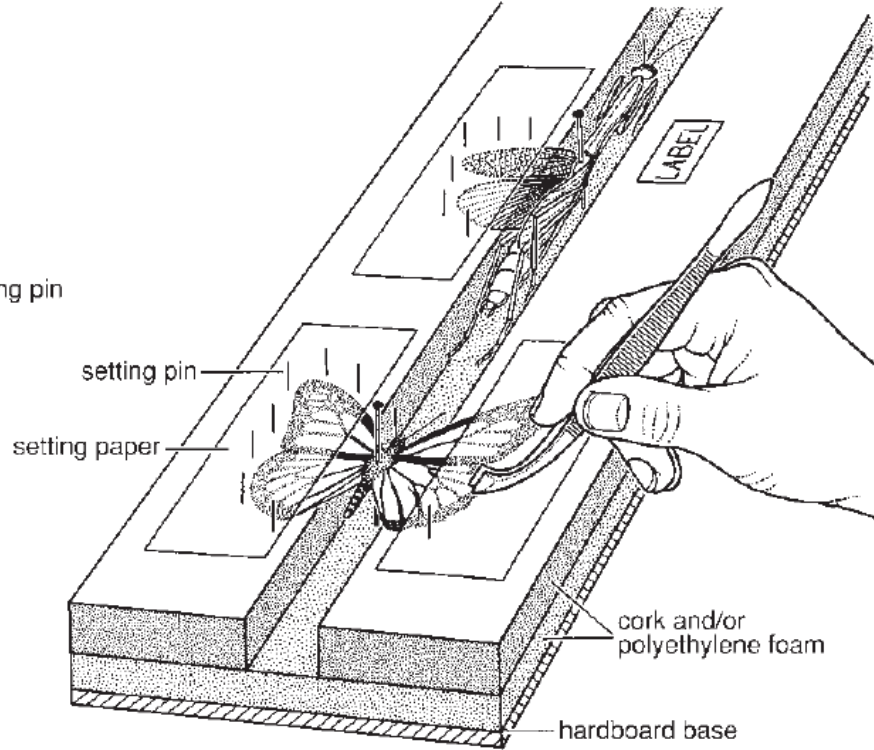
Suché preparáty – napínání končetin a křídel

(a)



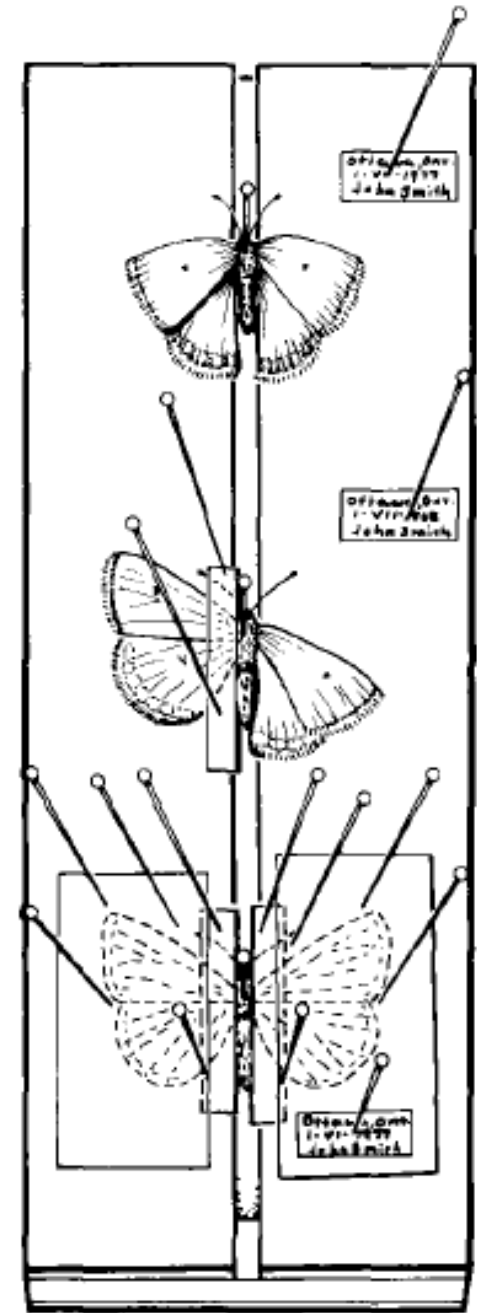
setting pin

(b)



Končetiny:

1. pár dopředu
2. pár pod tělo
3. pár dozadu



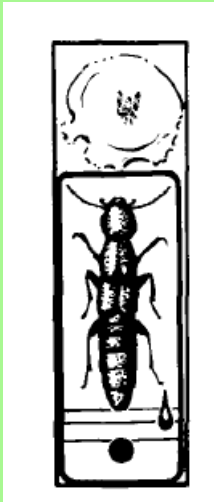
Kapalinové preparáty

- vajíčka, larvy + dospělci skupin s měkkým tělem (např. Archaeognatha, Zygentoma, Ephemeroptera, Plecoptera, Trichoptera, Hemiptera: Sternorrhyncha, Neuroptera, apod.)
- pro dlouhodobé uchování ideálně 75-80% ethanol
- pro mol.-biol. analýzy 99% ethanol
- někdy ve směsi s kys. mléčnou nebo octovou (zachová vláčnost, fixuje vnitřní struktury)
- formalin



Mikroskopické preparáty

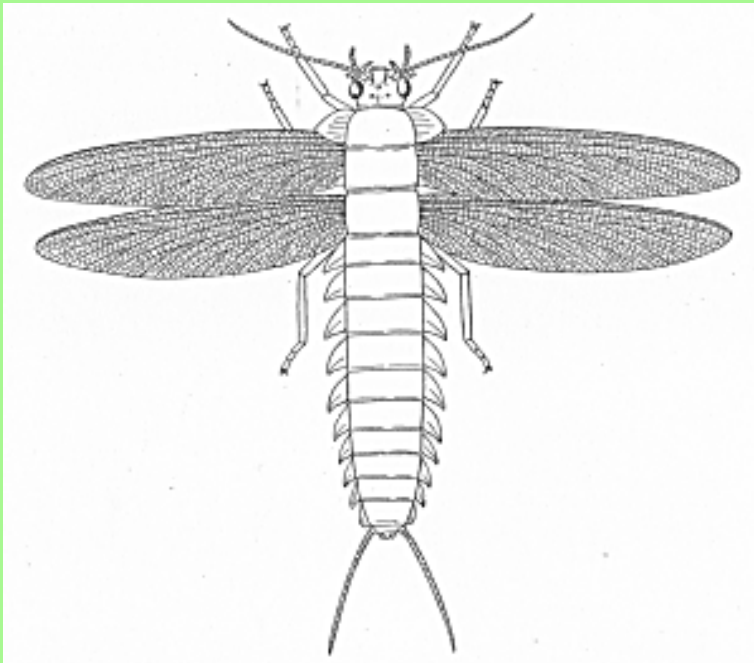
- částečné, totální
- trvalé (např. Kanadský balsám), dočasné (glycerol)
- předchází většinou macerace 10% KOH, a/nebo kys. mléčnou/octovou
- barvení (Chlorazol Black E, acid fuchsin)
- někdy nutné odvodnění alkoholovou řadou



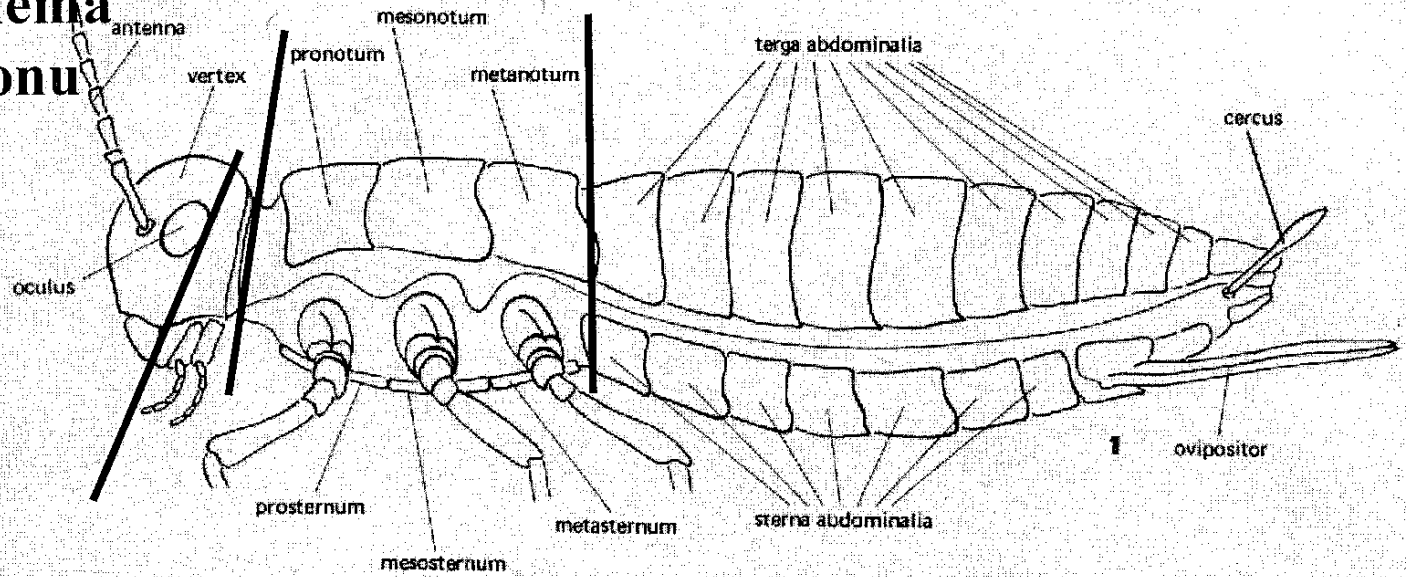
Habitus

protentomon = hypotetické tělní schéma hmyzu

- původně 20 somitů
- 3 tagmata
 - caput: procephalon + gnathocephalon
 - thorax: pro-, meso-, metathorax
 - abdomen: pův. 11 čl., cerci
- tergum, sternum, pleura

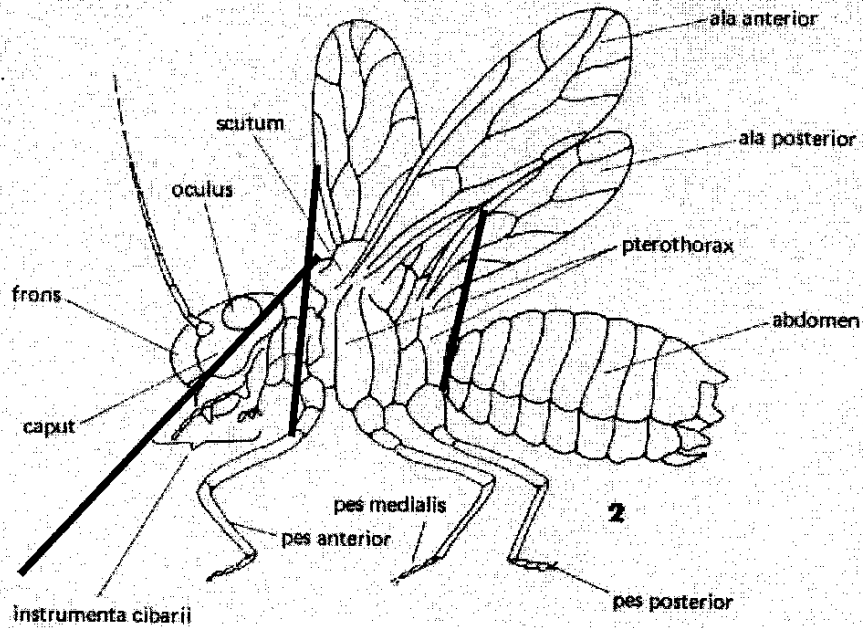
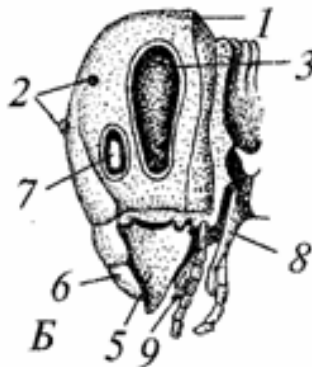
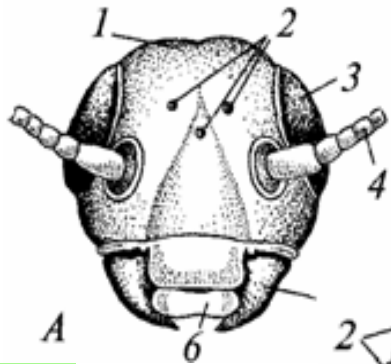


Obecné schéma protentomonu

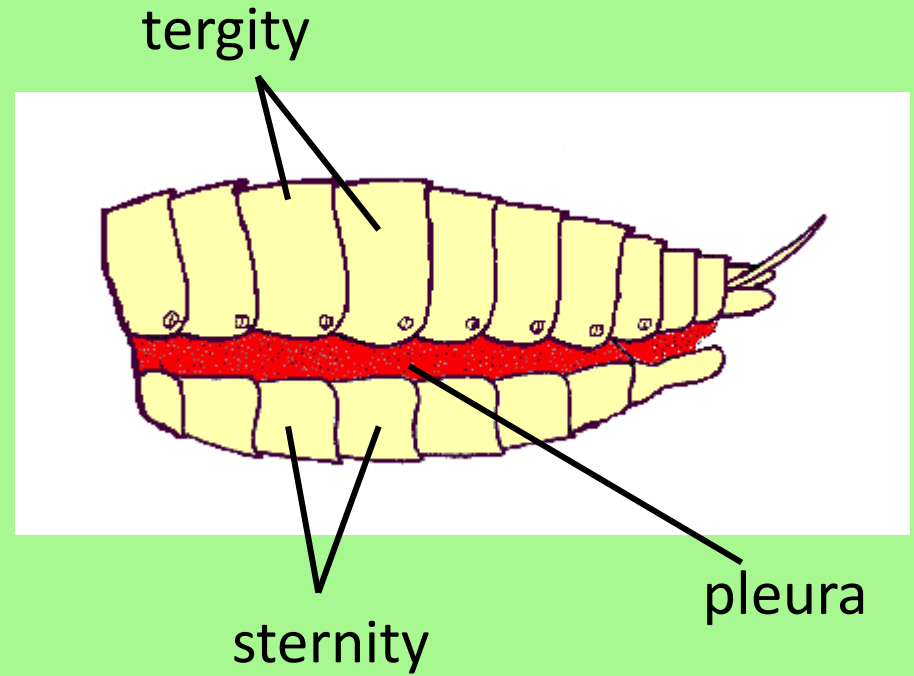
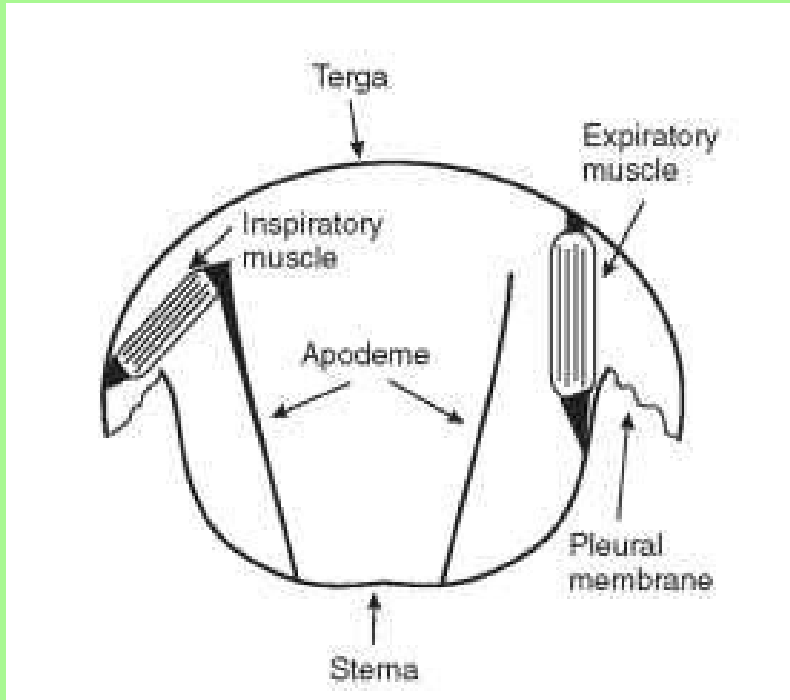


caput
thorax
abdomen

procephalon
gnathocephalon



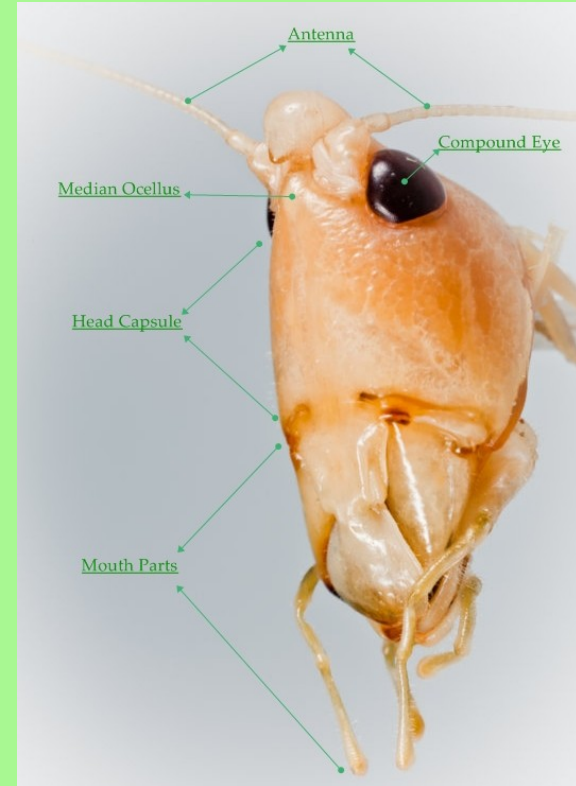
Sklerity



Entognatha vs. Ectognatha



Protura
Collembola
Campodeina
Japygina



Archaeoghanta
Zygentoma
Pterygota

Pterygota: Palaeoptera vs. Neoptera



Titanius giganteus

(Cerambycidae)

- 16.7 cm, 65 g



Dynastes hercules

(Scarabeidae) - 19 cm



Goliathus orientalis

(Cetonidae) - 10 cm



Megasoma actaeon

(Scarabeidae) - 13 cm

Lucanus cervus

(Lucanidae)

- 7.5 cm



Ergastes faber

(Cerambycidae)

- 6 cm



Saturnia pyri

(Saturnidae)

- 15 cm