

Coleoptera:

*Key to the Families of Coleoptera starts on page 377

Families you should know for the final practical:

- Passalidae
- Lampyridae
- Silphidae
- Lucanidae
- Gyrinidae
- Coccinellidae
- Tenebrionidae
- Meloidae
- Curculionidae
- Chrysomelidae
- Dermestidae
- Scarabidae
- Carabidae
- Buprestidae
- Cerambycidae
- Elateridae

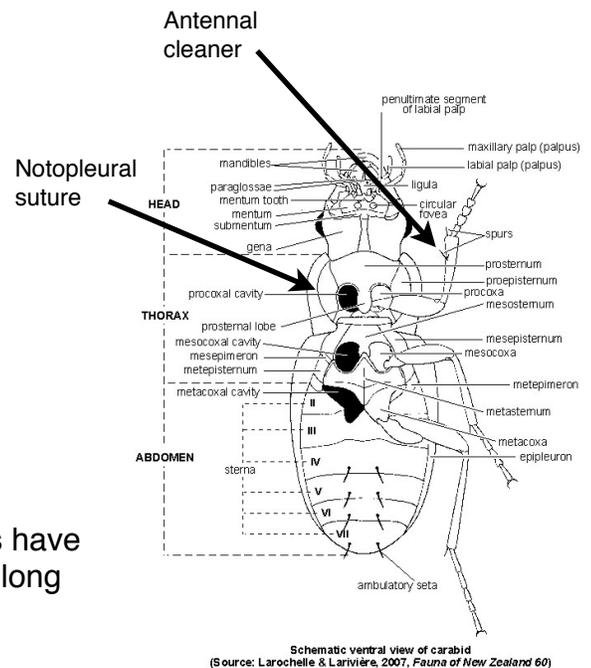
Comments about beetles and the key:

Yes, the key is long. But there are a LOT of beetles!

*I highly recommend reading the introduction on “Characters used in identifying beetles”, especially the sections on the thoracic characters

Suborder Adephaga have notopleural sutures = suture that separates pronotum from propleuron
 Adephaga also have hind coxa that divides the first abdominal sternite (see diagram at left)

Cerambycidae and Chrysomelidae have similar tarsal structures (i.e. pseudotetramerous), but cerambycids have unique antennae - first antennal segment is fat and long
 Scarabs: Front tibia is flattened and toothed
 Use the figures! They will help you a lot!



Schematic ventral view of carabid
 (Source: Laroche & Larivière, 2007, *Fauna of New Zealand* 60)

Terms you may not know:

Couplet 26: Look for a ventral ridge (carina), and a posterior face (groove), where femur can fit snugly

Closed front coxa = prothoracic sclerites extend posteriorly around coxa (Fig. 26-7 B)

Open front coxa = sclerite immediately behind coxa is mesathoracic sclerite (Fig. 26-7A)

Closed middle coxa = surrounded entirely by sterna (i.e. no pleural sclerites reach coxa)

Open middle coxa = Some of the pleural sclerites reach the middle coxa

Antennal cleaner = bristles at distal end of fore tibia

Rostrate = snout-like

Glabrous = smooth

Lamellate = antennae with platelike antennomeres (see Fig. 26-6, C-G)

Pectinate = with teeth

Emarginate = notched or indented

Pseudotetramerous = apparently has four tarsomeres, but next to last tarsomere may be small and hidden (Fig. 26-10)

Geniculate = elbowed

Connate = fused together

Carina = ridge/keel

Pygidium = last abdominal tergum

Trochantin = small sclerite in thoracic wall immediately anterior to base of coxa (see Fig. 26-9B)