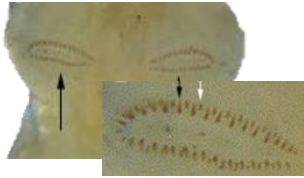


Aquatic Lepidoptera: family key



Proleg with crochets forming either:

- circle or incomplete circle
- ellipse
- sometimes appearing as transverse lines



Proleg with crochets in a mesoseries

or if an incomplete circle, crochets hook-like



Crambidae



Parapoynx



Acentria



Synclita



Petrophila



Elophila

- Larvae living in cases
- Cases made of: leaves or plant material
- Usually associated with lakes, ponds, quiet water



Genera in NE Canada & US (with keys in Merritt et al & Peckarsky):

- *Acentria*
- *Elophila*
- *Eoparargyractis*
- *Langessa*
- *Nymphula*
- *Nymphuliella*
- *Parapoynx*
- *Synclita*
- *Petrophila*

Noctuidae



Bellura

Genera in NE Canada & US (no keys in Merritt et al & Peckarsky, except Bellura):

- *Bellura*
- *Archanara*
- *Simyra*

-based on keys and descriptions from Merritt, Cummins & Berg (2008), Peckarsky (1990); by Michelle Dobrin, U of Windsor, 2017

-based on keys and descriptions from Merrit, Cummins & Berg (2008), Peckarsky (1990); by Michelle Dobrin, U of Windsor, 2017

Aquatic Lepidoptera: Crambidae

From Peckarsky 1990 (genus not keyed in Merritt et al 2008)

- No filamentous gills
- Crochets uniordinal or biordinal in circles
- Spiracles on abdominal segments 2-4 twice as large as those on 1, 5-8

Nymphula

Note: 1st instars without gills!



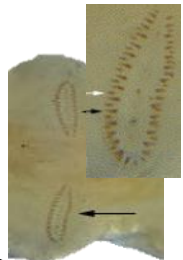
with filamentous gills

no filamentous gills



- All gills unbranched, lateral
- Head prognathous
- Body dorsoventrally flattened

- Crochets in ellipse, sometimes appearing as transverse lines
- Larvae living in cases of plant material



- Prothorax:
- lateral setae of T1 on ventral extension of prothoracic shield
 - with a very large blackish brown shield dorsally and with vestigial spiracles

Sphagnum bogs only (Peckarsky 1990)

Nymphuliella

Prothorax: lateral setae of T1 not on prothoracic shield



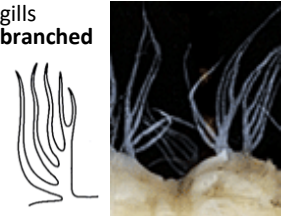
- Crochets triordinal (i.e. of 3 lengths)
- Head and cephalic shield of prothorax with extensive pattern of brown bands on cream-coloured background (in live specimens only)

Langessa

Crochets biordinal (i.e. of 2 lengths)

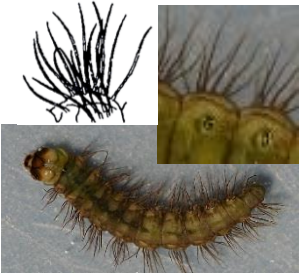


gills branched



Parapoynx

gills unbranched, uniformly distributed

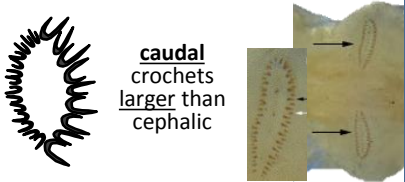


Petrophila

Gills on A9 and A10 extremely dense and long, forming a fan

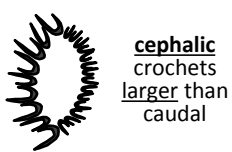


Eoparargyractis



caudal crochets larger than cephalic

Acentria



cephalic crochets larger than caudal

Synclita

Spiracles on abdominal segments 1-4 larger than other spiracles (Peckarsky 1990)



crochets equal on both cephalic and caudal side



Elophila

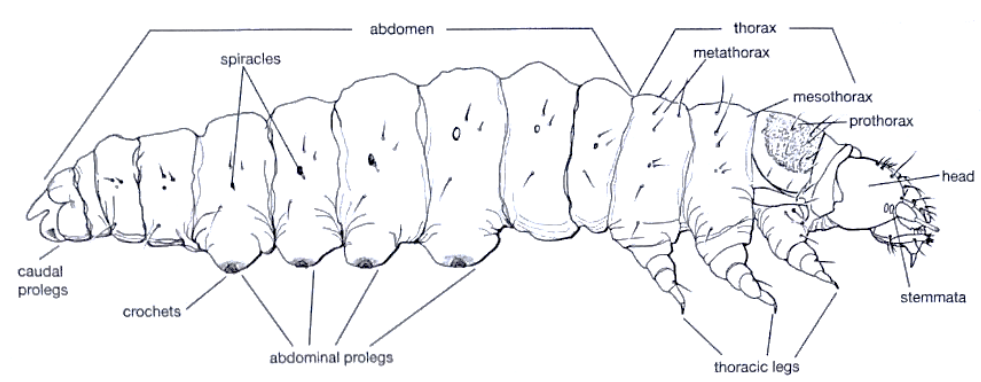
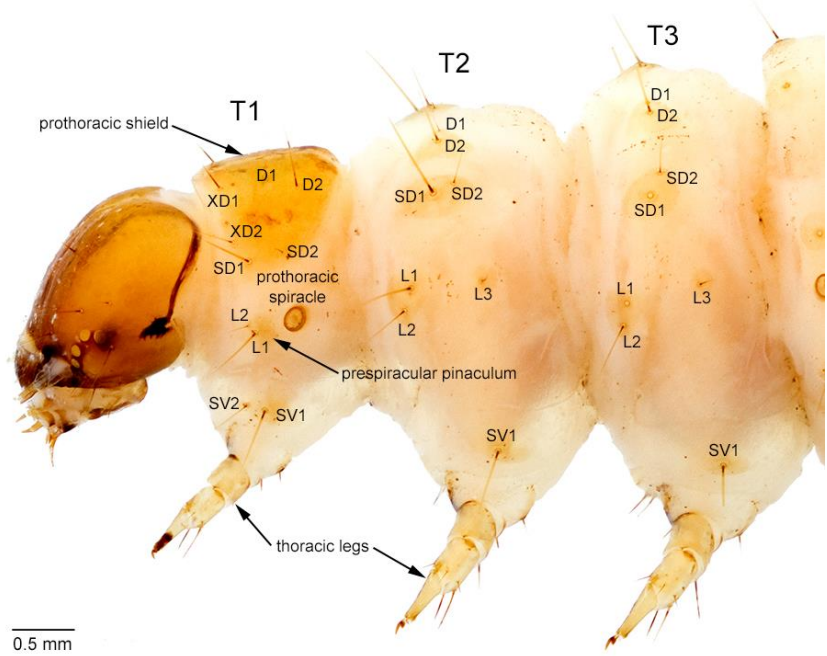
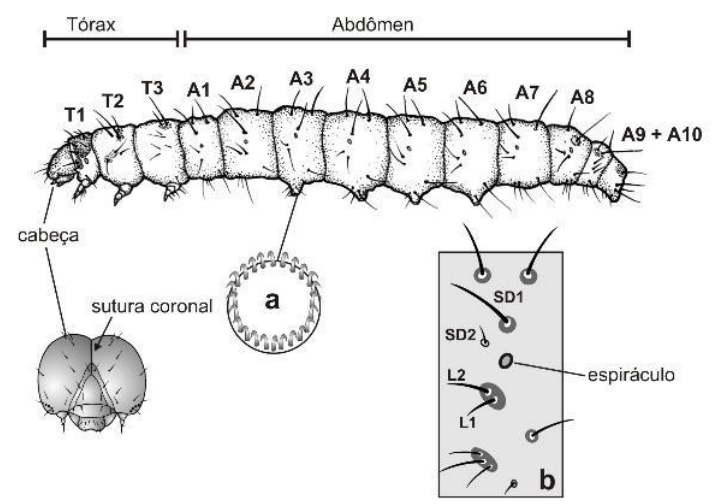
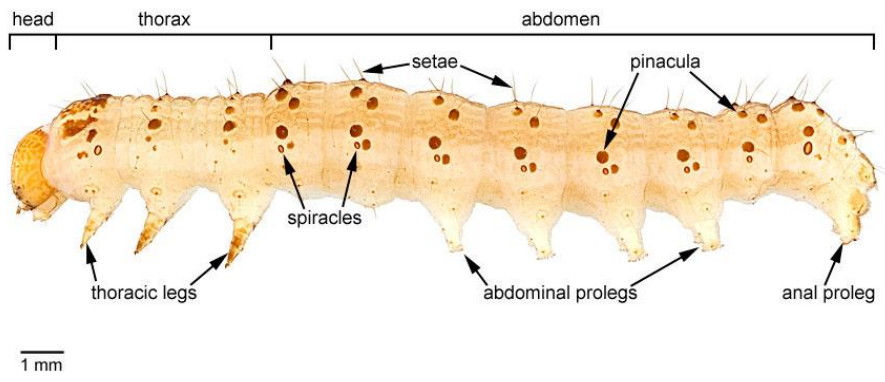
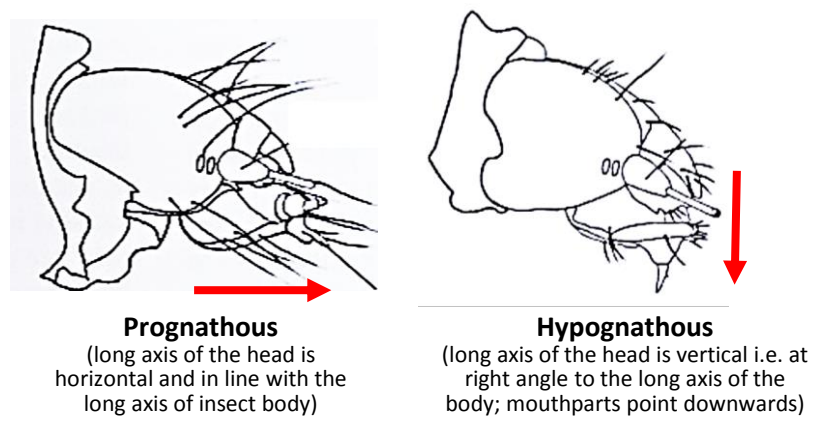


Figure 19.3

Cephalic: towards the head end of the body
Caudal: towards the tail end of the body



General anatomy/structures of larval Lepidoptera