

Overwintering mosquitoes of Northern Europe

Text and photo, Anders Lindström

Illustrations, Disa Eklöf



Maculipennis-complex

Malaria mosquitoes. Breeds in permanent waters, ditches, ponds. Overwinters as adult females. Easiest to find fall to spring

Five species that cannot be identified morphologically:

Anopheles messeae

Anopheles daciae

Anopheles beklemishevi

Anopheles maculipennis s.s.

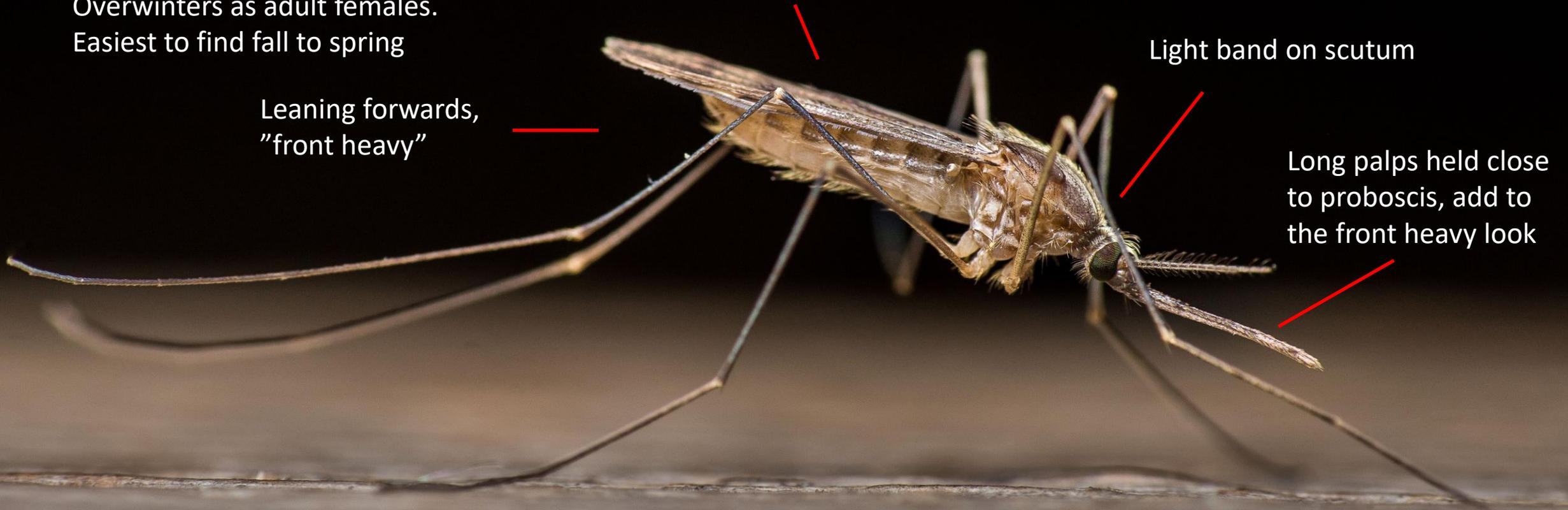
Anopheles atroparvus

Spotted wings

Light band on scutum

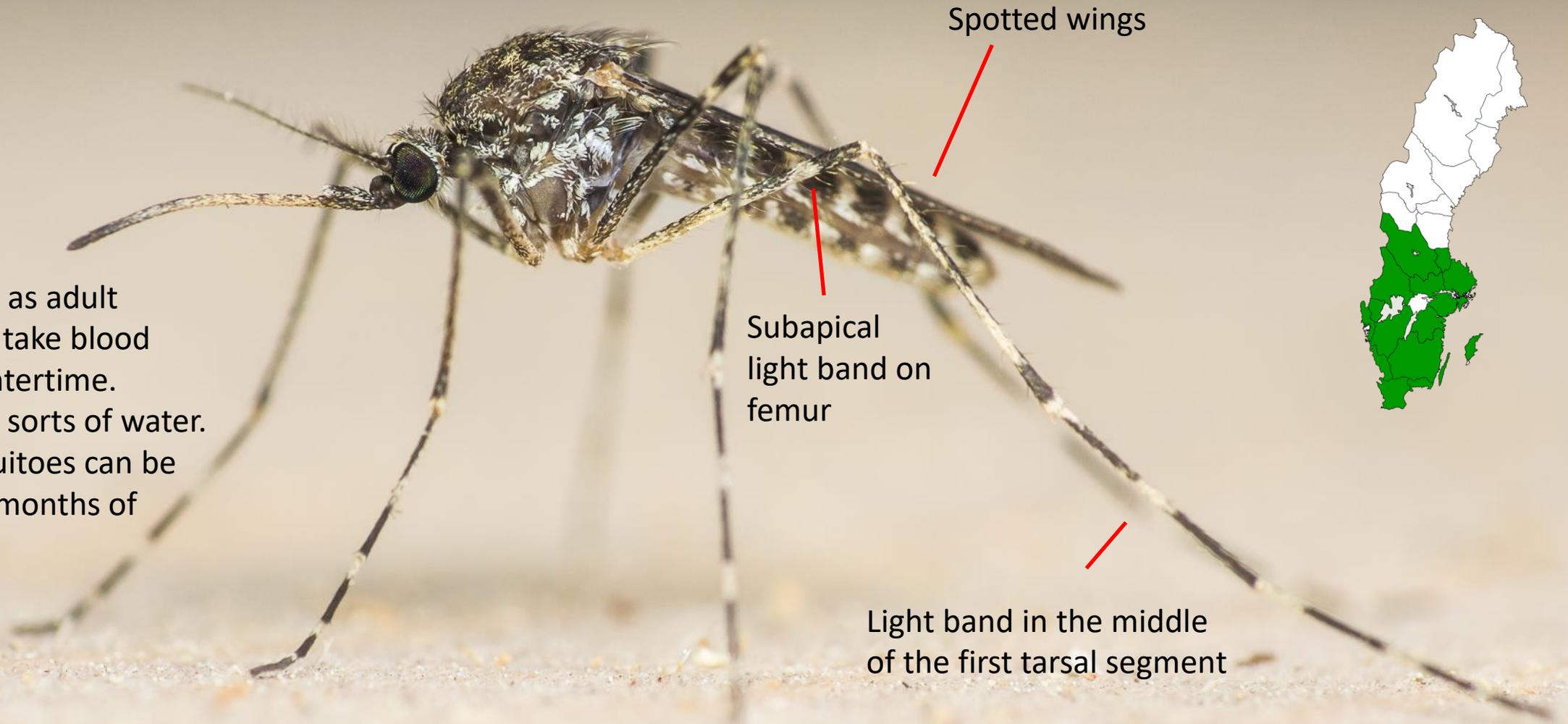
Leaning forwards, "front heavy"

Long palps held close to proboscis, add to the front heavy look



Culiseta annulata

Overwinters as adult female. Can take blood meals in wintertime. Breeds in all sorts of water. Adult mosquitoes can be found in all months of the year.



Culiseta annulata ♂

Although it will not live through the winter, male *Cs. annulata* can be found all autumn and well into December.

Males can be recognised on their long palpi and bushy antenna. They do not take bloodmeals.



Culiseta subochrea

Rare species! Looks like a very light coloured *Culiseta annulata*.

Very light abdomen

Overwinters as adult.
Breeds often in brackish water, but can be found in fresh water also.

Broader light bands than *Cs. annulata*

Light integument

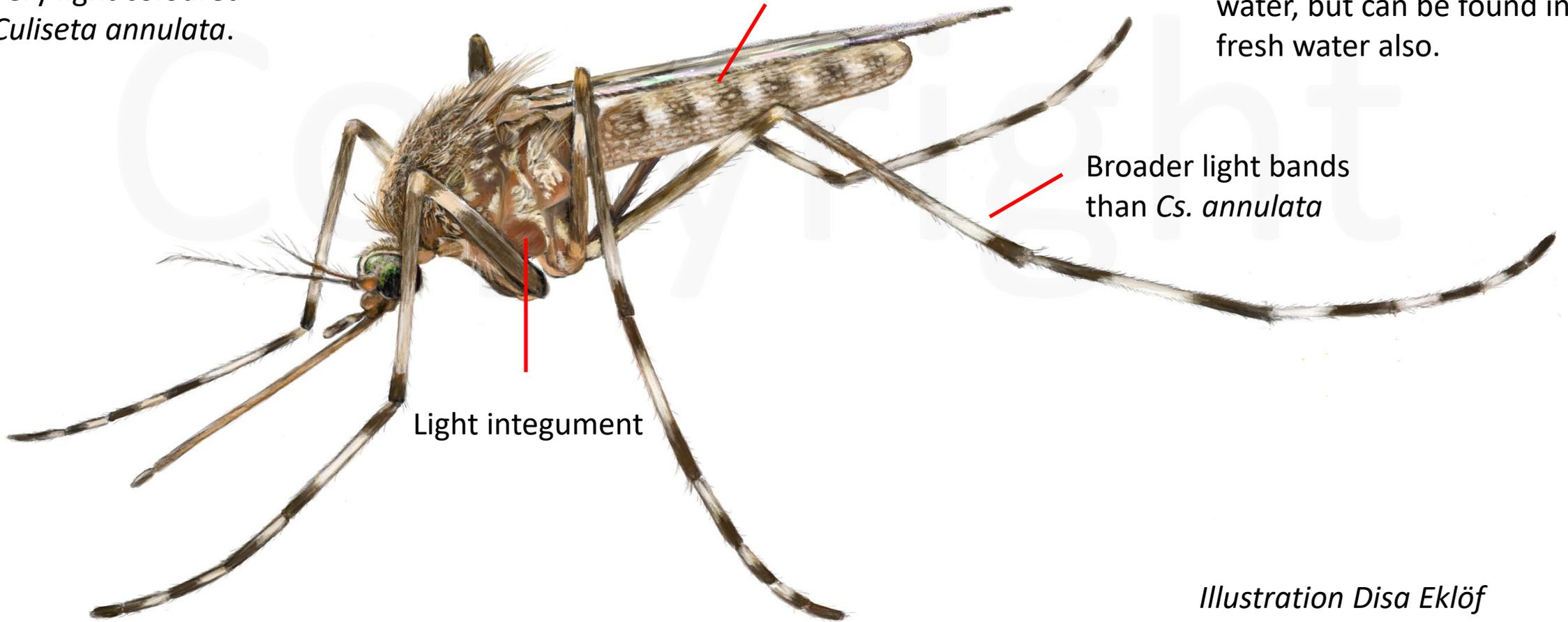


Illustration Disa Eklöf

Culiseta alaskaensis

Very large! The largest mosquito in Northern Europe

Overwinters as adult, one of the first on the wing in spring. Can be found in many different habitats.



No subapikal band

Light bands on the other tarsal segments

First tarsal segment without light bands



Culiseta annulata



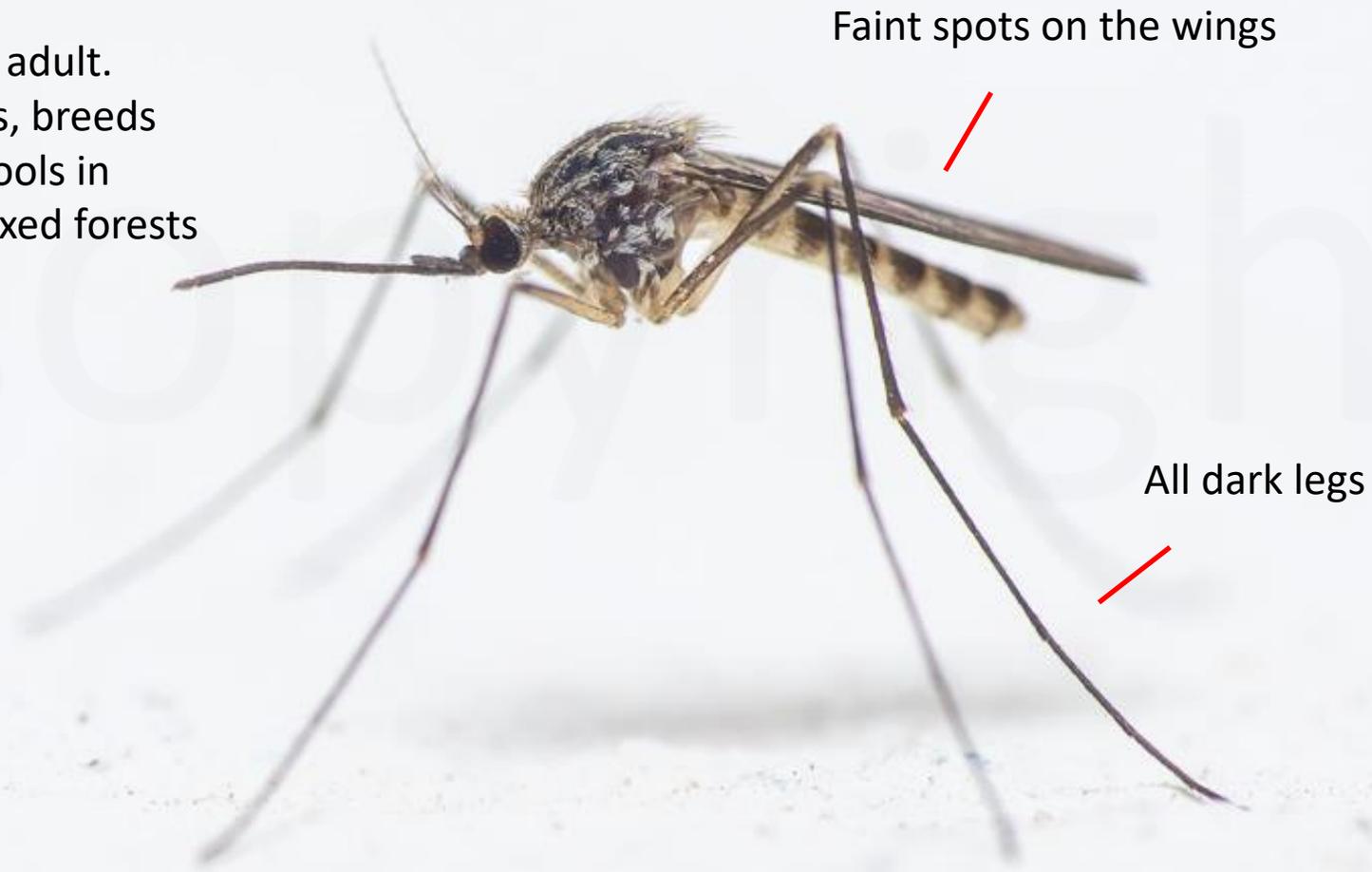
Culiseta subochrea



Culiseta alaskaensis

Culiseta bergrothi

Overwinters as adult.
A forest species, breeds
in shadowed pools in
needle- and mixed forests



Culiseta glaphyroptera

Overwinters as adult.
Breeds in rocky pools
with dead leaves on the
bottom.

Large! Often found
overwintering several
together.

Dark legs

Unspotted wings

Dark palps

Differences between *Cs. glaphyoptera* and *Cs. bergrothi*

glaphyoptera

bergrothi

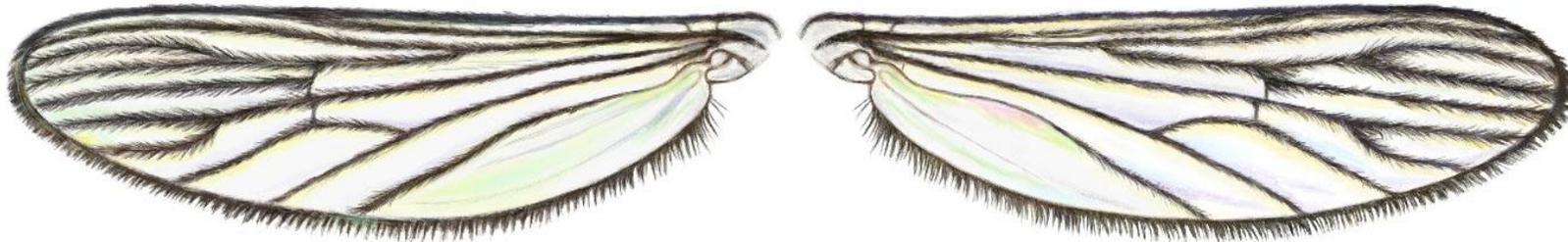


Darker palps



glaphyoptera

bergrothi



No spots

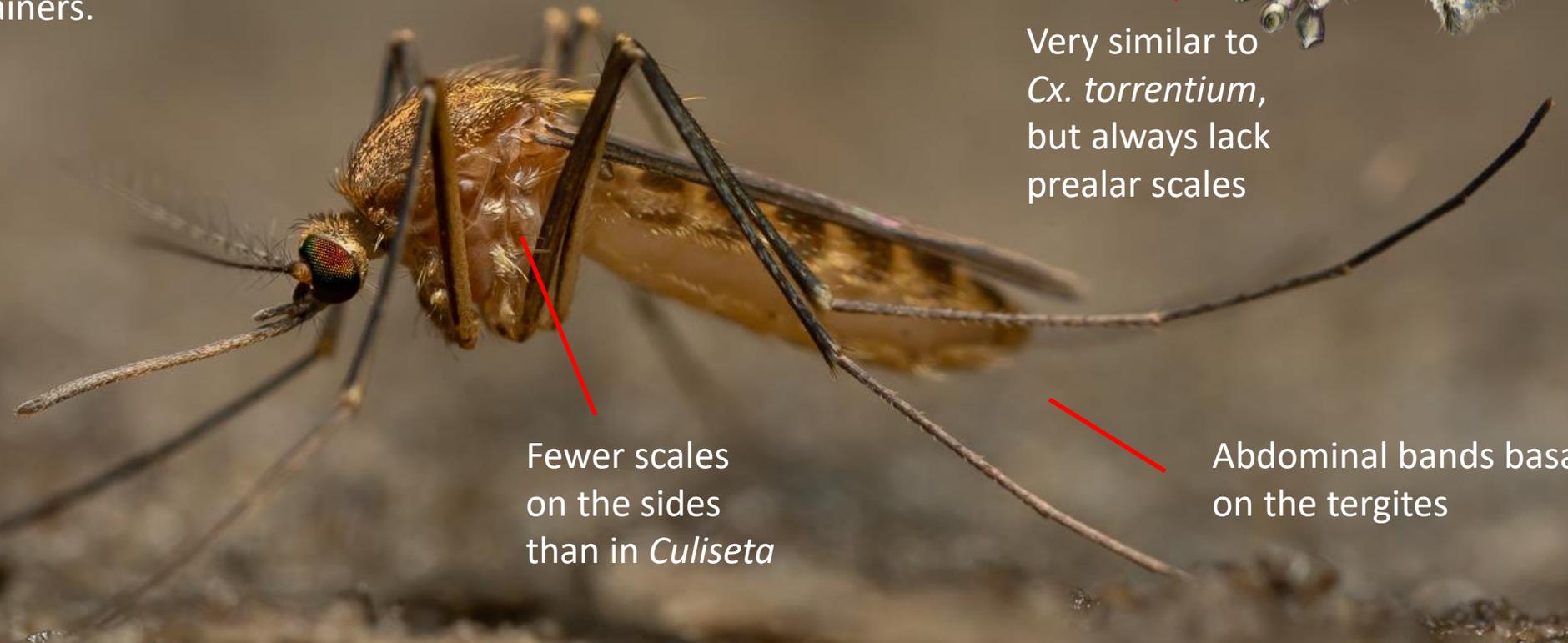
Faint spots



More than 16 pre-spiracular setae = *glaphyoptera*

Culex pipiens

Overwinters as adult.
Can breed in all sorts
of stagnant water.
Often in containers.

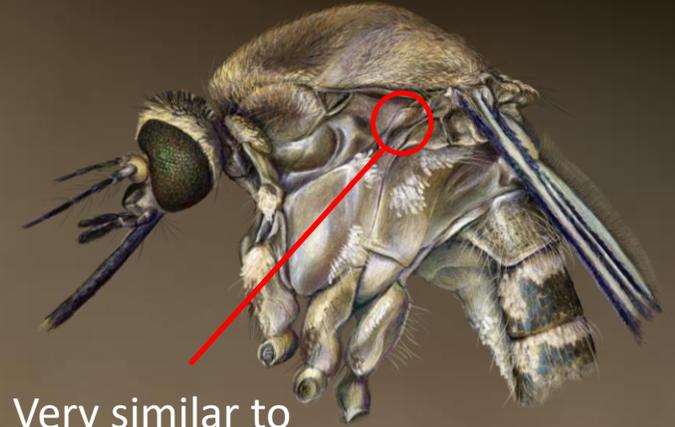


Fewer scales
on the sides
than in *Culiseta*

Smaller than a *Culiseta*

Very similar to
Cx. torrentium,
but always lack
prealar scales

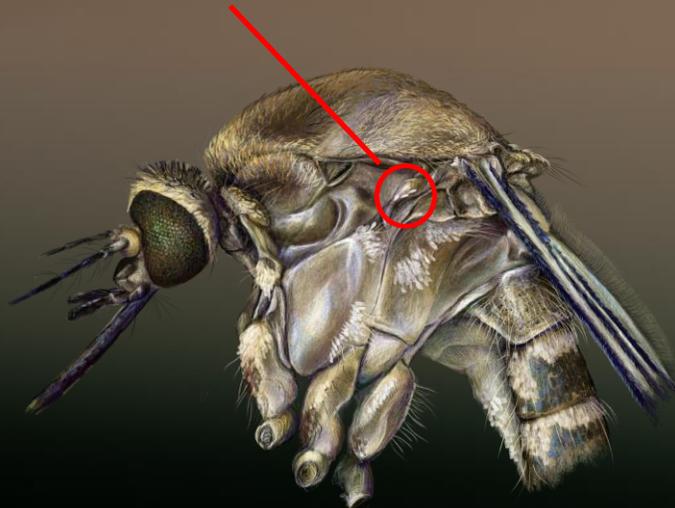
Abdominal bands basally
on the tergites



Culex torrentium

Overwinters as adult.
Can breed in all sorts
of stagnant water.
Often in containers.

Very similar to *Cx. pipiens*.
Has got prealar scales,
but these can be worn off.



Males of *Cx. pipiens* and *Cx. torrentium* can also be found in late fall, beginning of winter.



Culex territans

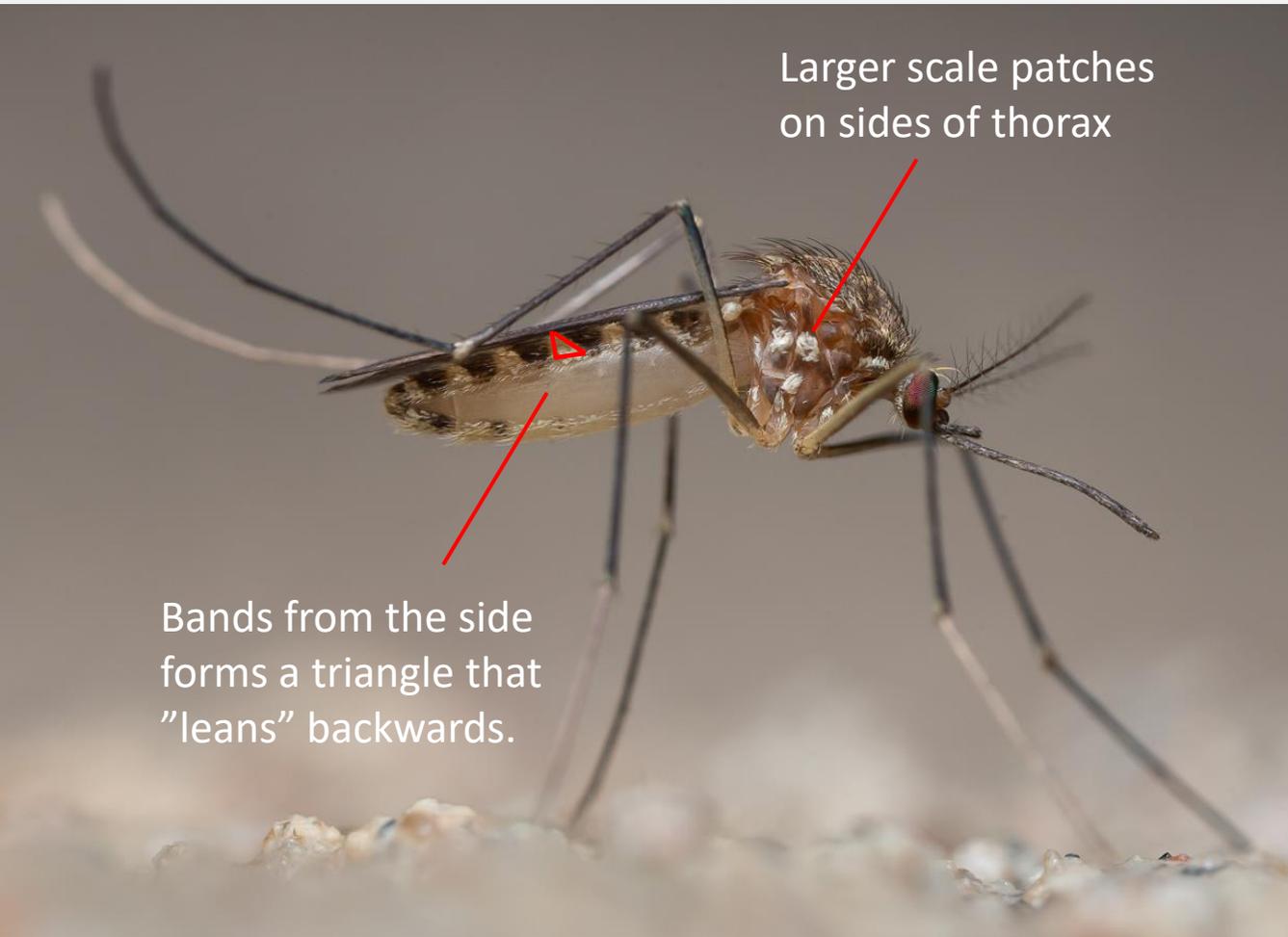
Overwinters as adult.
Larvae in pools, ditches etc,
with vegetation.



Light bands in
apical part of
tergites.

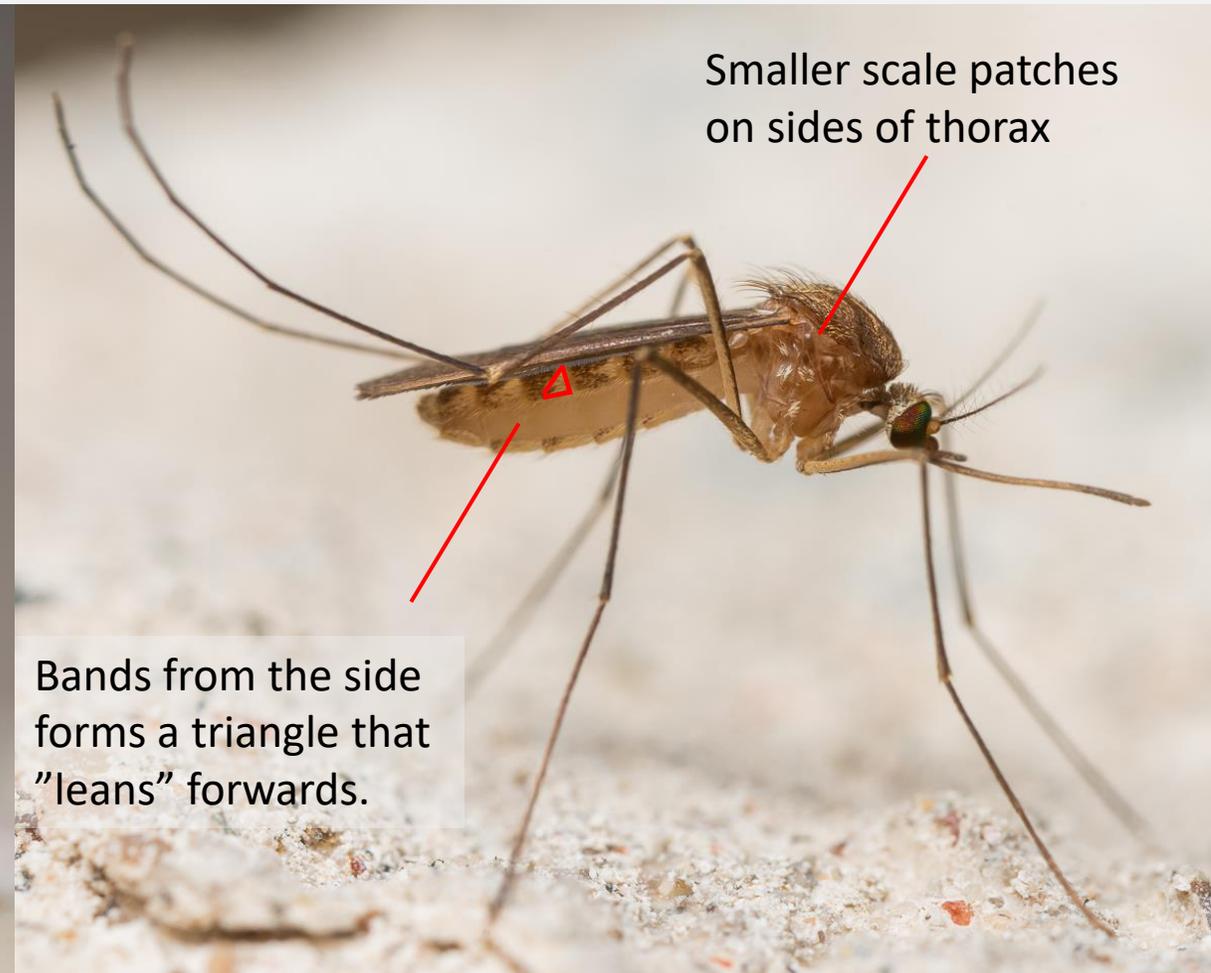


Culex territans



Generally more contrasty

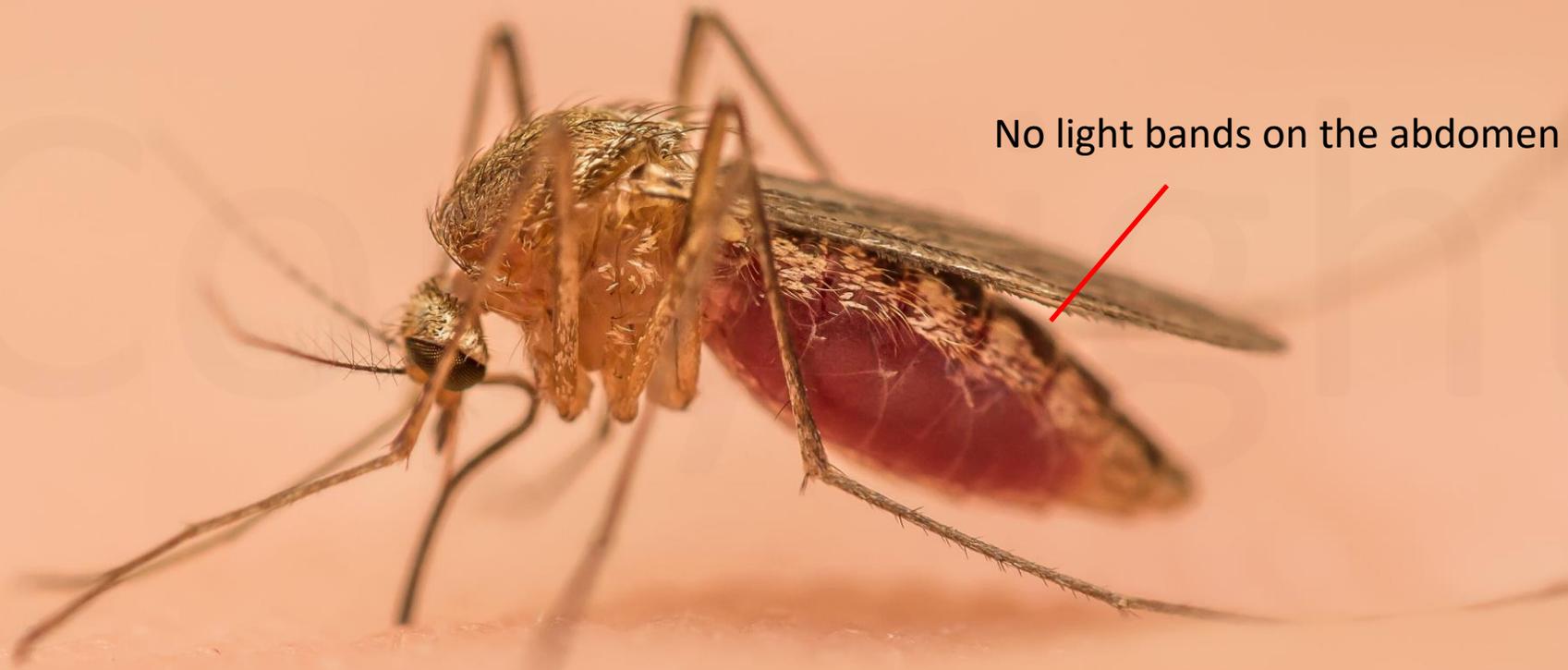
Culex pipiens/torrentium



Redbrown, not so contrasty

Culex modestus

Overwinters in reeds.
Often coastal.





Culex pipiens/torrentium



Culex territans



Culex modestus