

Ohio *Ceratina* ID

Small carpenter bees

Separating Sexes

Male

Traits of male Small Carpenter bees (Genus *Ceratina*):

- 13 antennal segments
- No sting
- **Face with large hat shaped yellow spot (yellow filling clypeus)**
- Expanded flange on "butt"
- Expanded hind femur (and no pollen collecting hair on legs)

Female

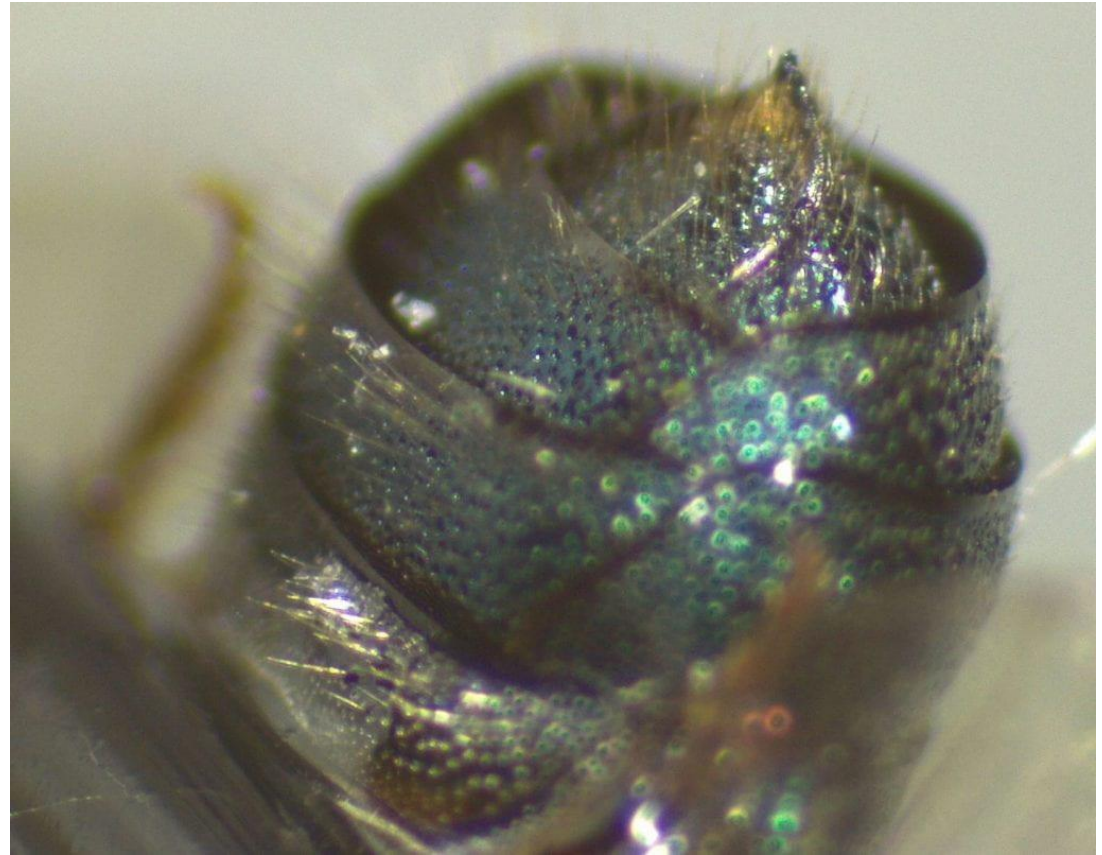
Traits of female Small Carpenter bees (Genus *Ceratina*):

- 12 antennal segments
- has sting
- **face with small yellow spot on center (or no yellow)**
- pollen collecting hairs on leg

Separating sexes - Male



Separating sexes - female



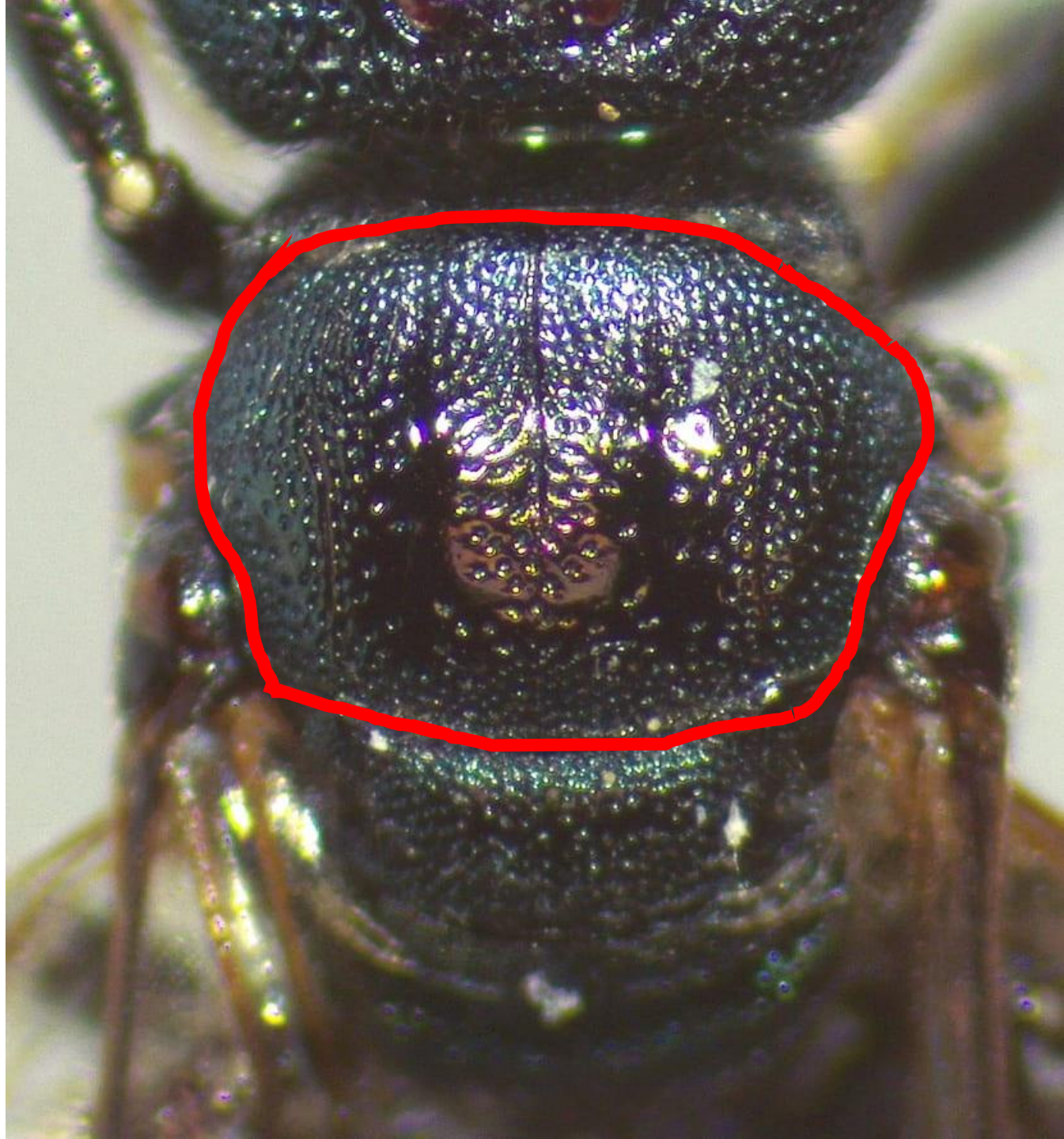
Female Ceratina species ID

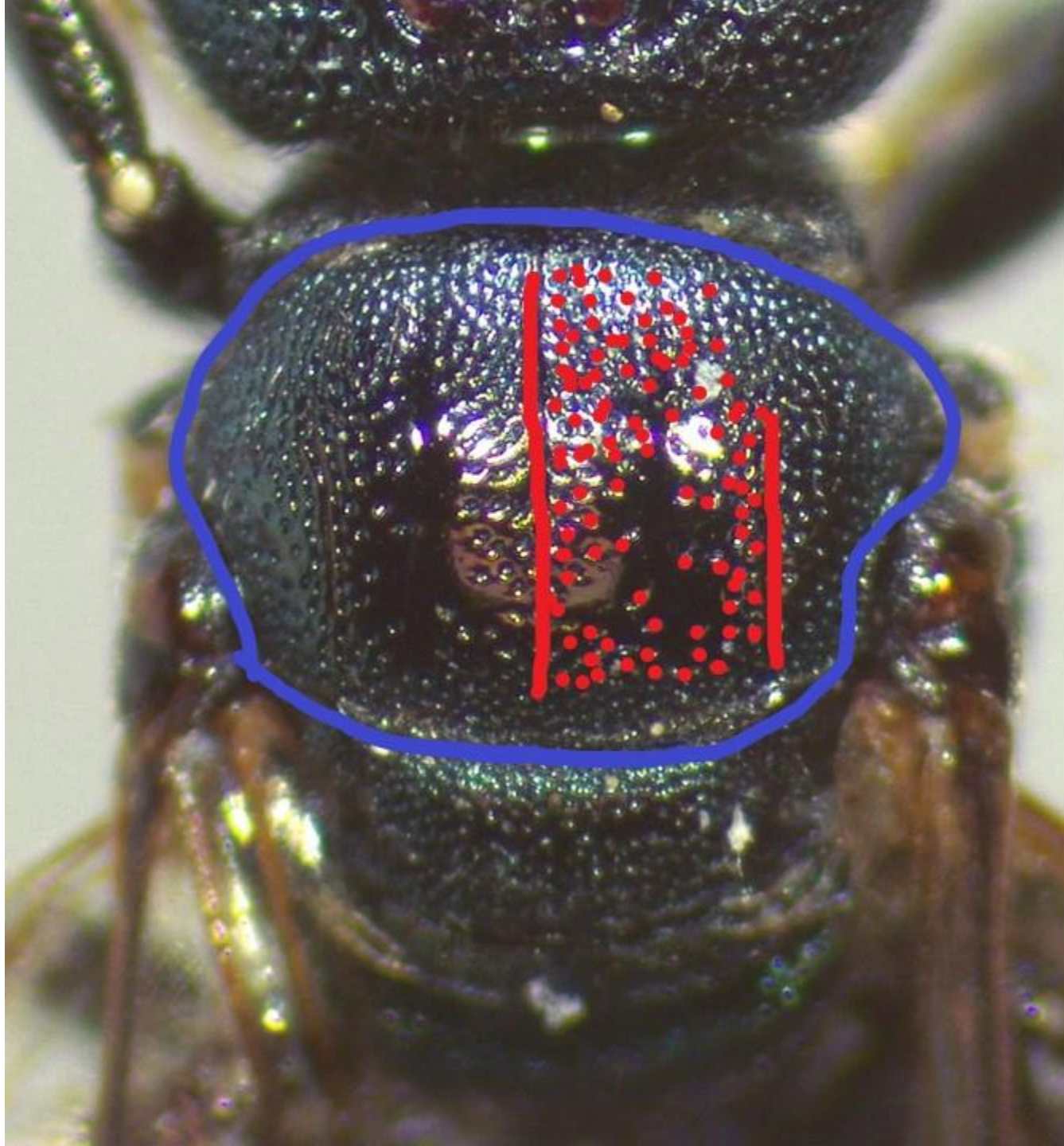
- Foreleg with long yellow stripe → ***Ceratina strenua***
- Foreleg minimal yellow → keep going (either *Ceratina mikmaqi*, *C. dupla*, or *C. calcarata*.)



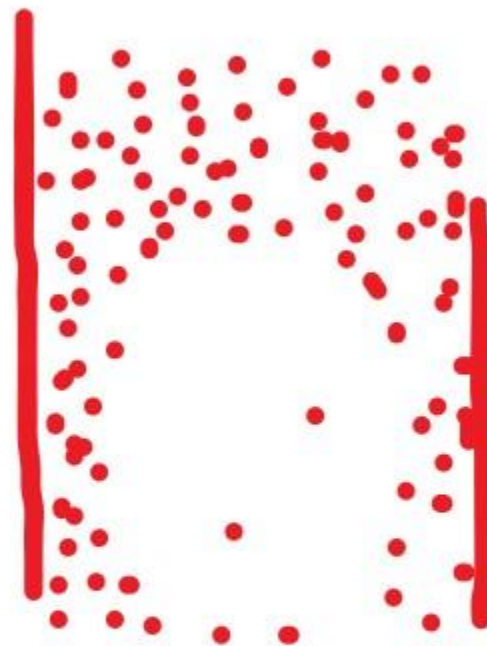
Female Ceratina species ID cont..

- Several rows of pits bordering the center lines on the scutum (plate on the back of the bee) = ***Ceratina dupla***
- No more than one complete row of pits on the scutum --> either *C. mikmaqi* or *C. calcarata*.





Ceratina dupla



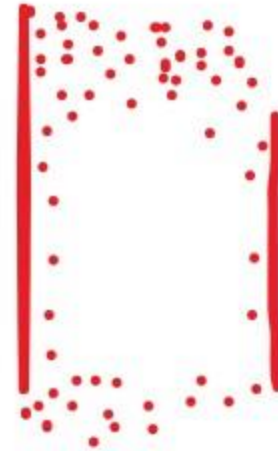
Female Ceratina species ID cont..

- Several rows of pits bordering the center lines on the scutum (plate on the back of the bee) = *Ceratina dupla*
- No more than one complete row of pits on the scutum --> either *C. mikmaqi* or *C. calcarata*.



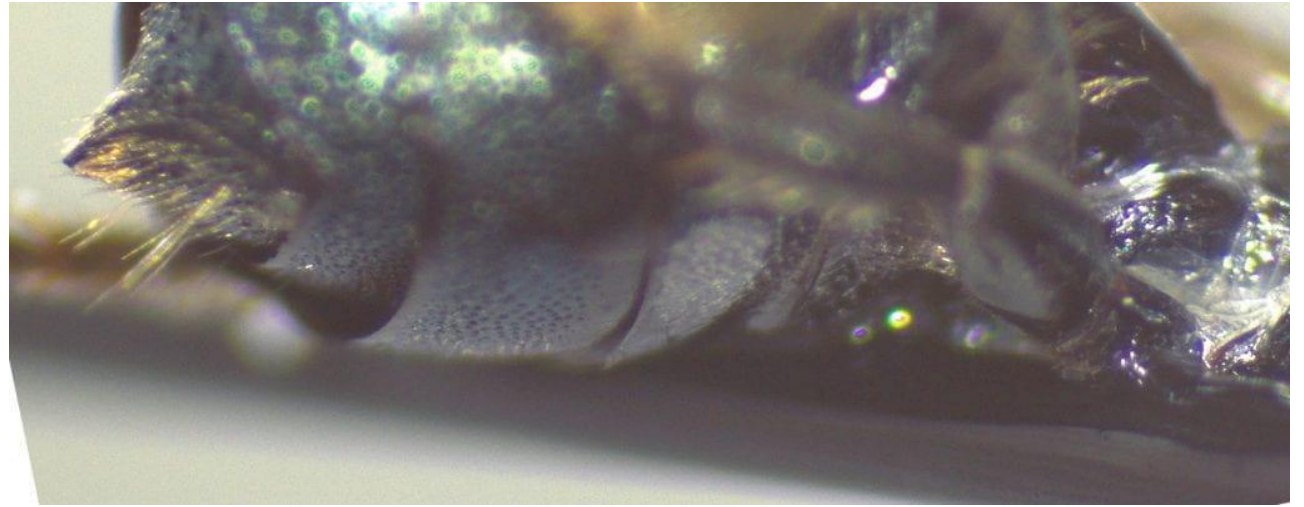


Ceratina
calcarata/mikmaqi



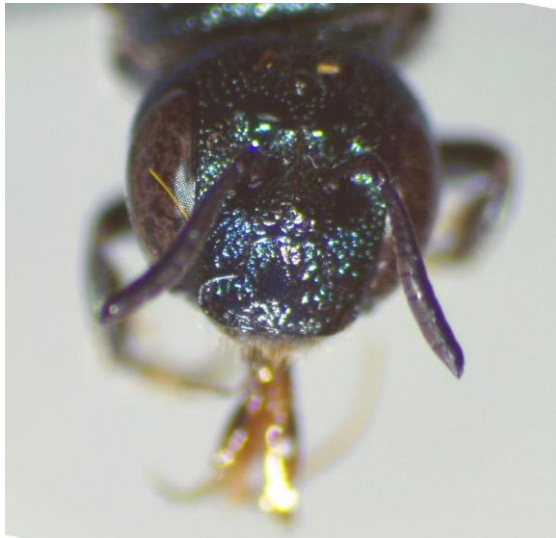
Female Ceratina species ID cont..

- Underside of abdomen largely hairless, and when hairs do exist, they are slightly tan colored; yellow mark on face always present = ***C. mikmaqi***



Female Ceratina species ID cont..

- Underside of abdomen with many hairs on each segment, hairs are white; the yellow mark on the face is *sometimes* reduced or absent entirely = **C. calcarata**

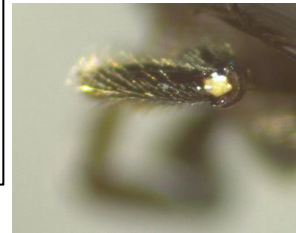


Summary female ID Slide

1. Foreleg half yellow
→ *Ceratina strenua*

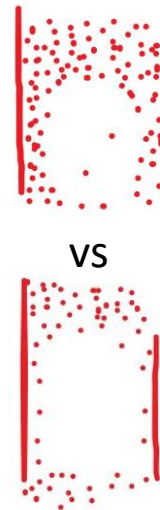


Foreleg with minimal yellow
→ *C. mimkaqi/calcarata/dupla*
Continue to 2



2. Several rows of pits on scutum
→ *Ceratina dupla*

No more than a single row of pits
→ *C. mikmaqi/calcarata*
Continue to 3

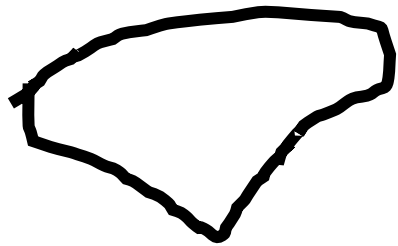


3. Abdomen minimally haired,
hairs that are present are slightly tan,
yellow on face present
→ *Ceratina mikmaqi*

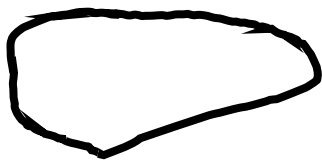
Abdomen with many WHITE hairs,
the yellow mark on the face variable
→ *Ceratina calcarata*

Male ceratina ID

- Hindleg femur greatly expanded = either *C. strenua* or *C. calcarata*



vs

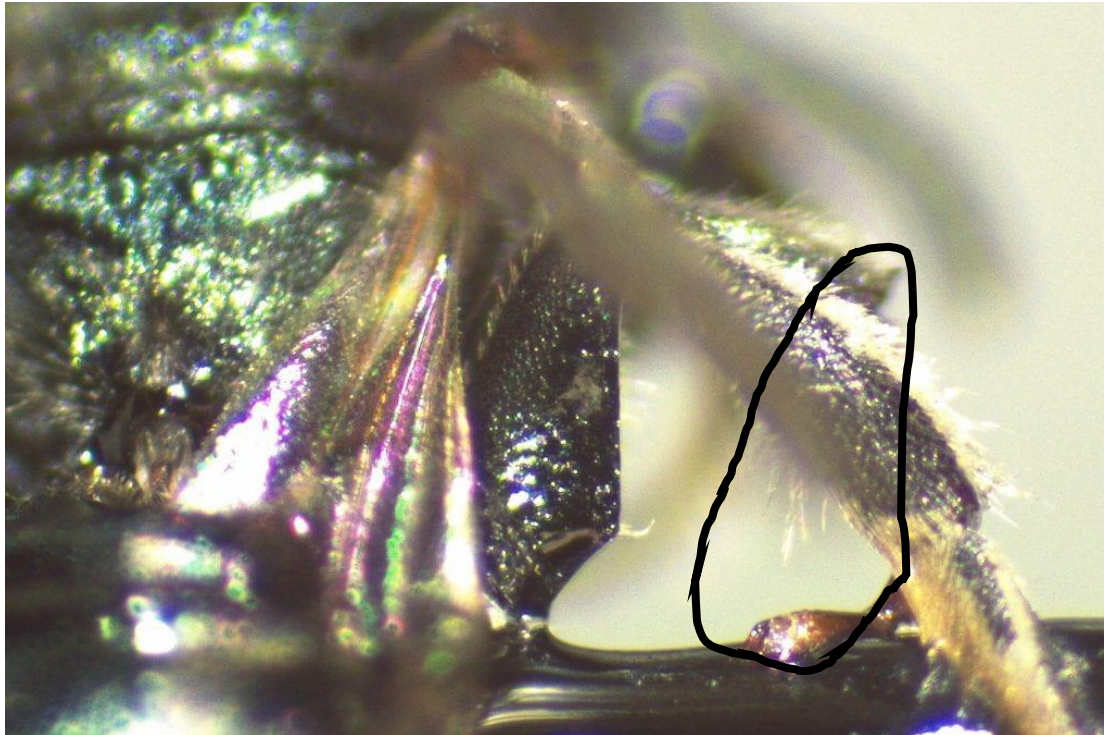


The widest point
of femur typically
middle of femur

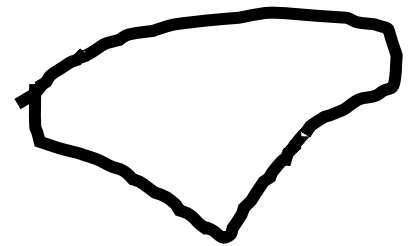


Male Ceratina ID

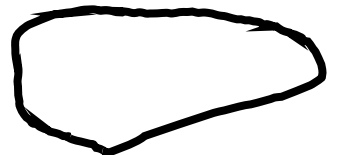
- hindleg femur not as expanded (though still expanded in comparison to females) = either *Ceratina dupla* or *C mikmaqi*



The widest point
of femur typically
closer to the body

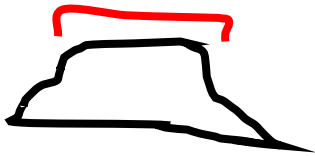
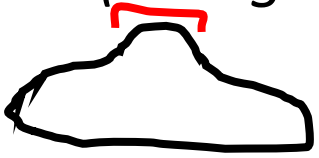


VS



Separating male calcarata from strenua

- Look at flange on end of abdomen
- Narrowed flange = *C. strenua*
(also generally has foreleg entirely yellow)



- Wide flange
= *C. calcarata*
- (foreleg yellow variable,
but up to half yellow)

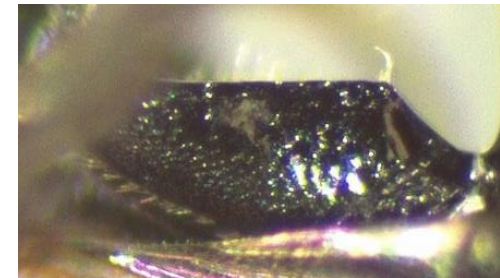


Separating male *dupla* from *mikmaqi*

- ☹️ Leave in their own box for someone else to go through.
Label as ***Ceratina dupla/mikmaqi***

Technical characters, looking at hind femur flange again. Very hard to see character and often obscured with glue.

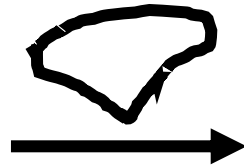
- ***Ceratina dupla*** → tuft of microscopic hairs at widest point and edge of femur sharp like knife when viewed edge on
- ***Ceratina mikmaqi*** → no tuft of microscopic hairs at widest point and edge of femur slightly rounded.



Summary male ID Slide

1. Hindleg femur greatly expanded
→ ***C. strenua/calcarata***
Continue to 2

Hindleg femur not as expanded
→ ***C. dupla/mikmaqi***
Continue to 3



vs



2. Narrow t7 flange 
(foreleg also typically entirely yellow)

→ ***C. strenua***

strenua is also only male species with narrowed flange. The other 3 have wide flanges

Wide t7 flange 

(foreleg yellow variable, but up to half yellow)

→ ***C. calcarata***

3. ID as ***Ceratina dupla/mikmaqi*** and stop.

Or if can see hind femur well:

Tuft of microscopic hairs at widest point
and edge of femur sharp like knife

→ ***C. dupla***

No tuft of microscopic hairs at widest
point and edge of femur slightly rounded

→ ***C. mikmaqi***