

Identifying soldierflies and allies: *Chloromyia* and *Microchrysa* soldierflies

Version 2 updates:

- Extra photos of *M. cyaneiventris* male
- Key added to maps

Version 3 updates:

- Extra photos of male and female *M. cyaneiventris*

Compiled by Martin C. Harvey for the Soldierflies and Allies Recording Scheme

Version 3 at 12 August 2021

These guides are only possible thanks to the generosity of the brilliant photographers who have allowed their images to be used. Special mention must be given to Malcolm Storey and Steven Falk, whose photo collections form the backbone for most of the species guides:

Malcolm Storey's [BioImages website](#) – Steven Falk's [photo collections on Flickr](#)

Other photographers included in this guide are Alastair Forsyth, Allan Burrows, Ian Andrews, Janet Graham, Martin Harvey, Nicola Garnham and Per Smiseth.

Males are shown first, one page for each species, then females. The pages for males include distribution maps taken from the recording scheme's [provisional atlas](#) (Harvey 2017).

As far as possible, these guides show features that can be seen on live insects in the field, or are likely to be visible in photographs. For comprehensive identification keys and species accounts see [British soldierflies and their allies](#), by Alan Stubbs and Martin Drake. See also the recording scheme's [additional notes](#) to accompany the Stubbs and Drake keys.

For lots more information on soldierflies and allies go to the recording scheme [website](#), [Twitter](#) page or [Facebook](#) group.

For lots more information and events, and to support the study and conservation of flies, please consider joining [Dipterists Forum](#).

Records wanted!

Once you have identified your fly, please let the recording scheme have the details! Add to [iRecord](#) or send to the [recording scheme](#) so that we can share the records for conservation and research.

The Soldierflies and Allies Recording Scheme is part of Dipterists Forum



The Soldierflies and Allies Recording Scheme is supported by the UKCEH Biological Records Centre



Recognising the genus: *Chloromyia* and *Microchrysa*

The genus *Chloromyia* contains a single species, and *Microchrysa* has three. They are similar in being metallic green, bronze or blue, and in lacking spines on the scutellum. *Chloromyia* is noticeably larger and broader-bodied than *Microchrysa*, but this can be difficult to appreciate in isolation, or from a photo, and the two genera are frequently confused.

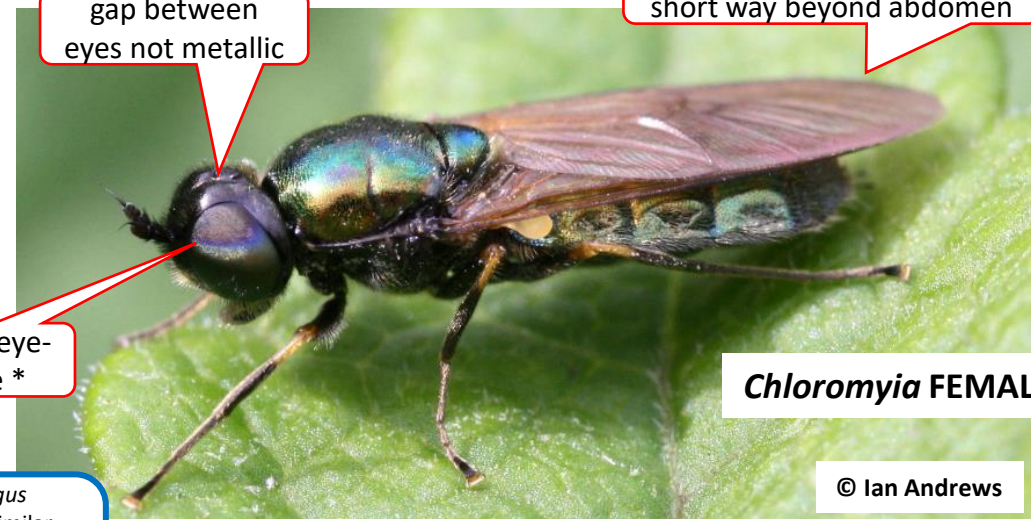
Chloromyia formosa is our most common soldierfly. *Microchrysa flavicornis* and *M. polita* are also widespread, with *M. cyaneiventris* being more restricted and commoner in the north.



wings brownish, extend a short way beyond abdomen

***Chloromyia* MALE**

© Martin Harvey



gap between eyes not metallic

wings brownish, extend a short way beyond abdomen

***Chloromyia* FEMALE**

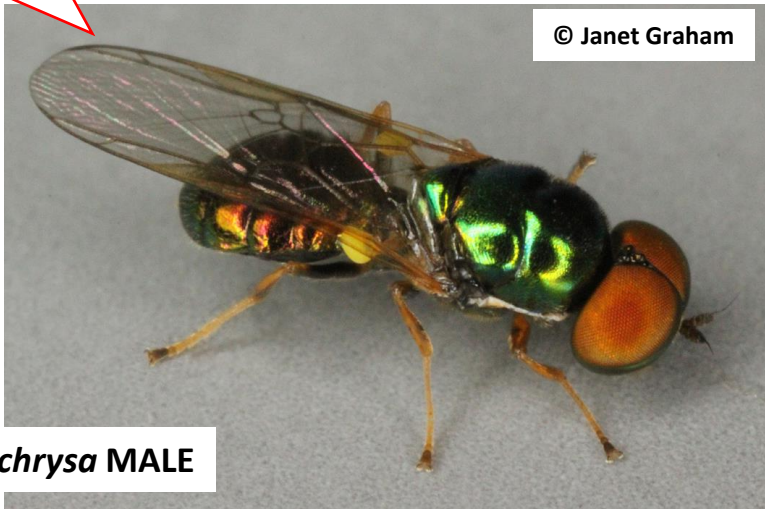
© Ian Andrews

larger: 8–9mm long, with hairy eyes and thorax

purple eye-stripe *

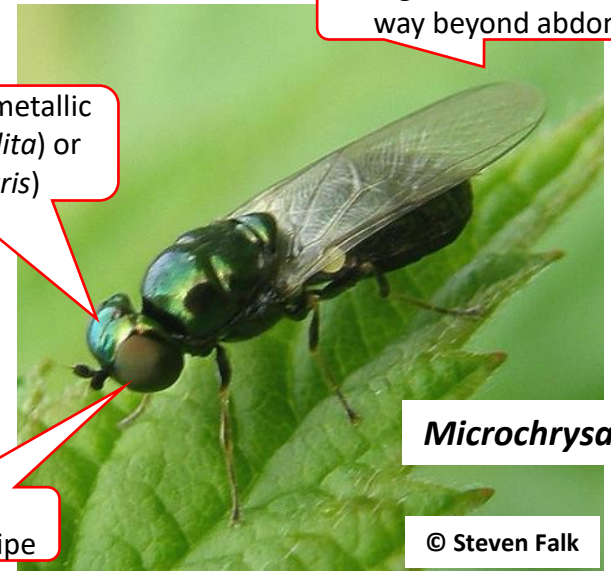
* Species of *Sargus* soldierfly have similar eye-stripes, but *Sargus* are longer and thinner than *Chloromyia*, and do not have hairy eyes

wings clear, extend a long way beyond abdomen



© Janet Graham

***Microchrysa* MALE**



wings clear, extend a long way beyond abdomen

gap between eyes metallic (*flavicornis* and *polita*) or not (*cyaneiventris*)

***Microchrysa* FEMALE**

© Steven Falk

smaller: 3–5mm long, with smooth eyes and shiny thorax

no obvious purple eye-stripe

© Malcolm Storey / Biolimages



eyes noticeably hairy

dark legs with yellow 'knees'

broad, flat abdomen (usually bronze in male)

[Biolimages link](#)



© Malcolm Storey / Biolimages

***Chloromyia formosa* (Broad Centurion) - MALE**

- ID difficulty: 1
- Flight period: May to early Sep
- GB threat: Least Concern
- widespread
- fens, marshes, meadows, woodland glades, gardens, usually on rich soils
- No. of records: 7252 • % since 2000: 48%

© Martin Harvey

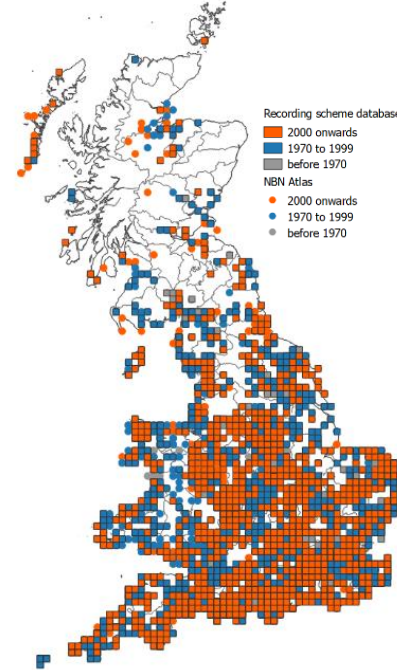


brownish wings



[Steven Falk link](#)

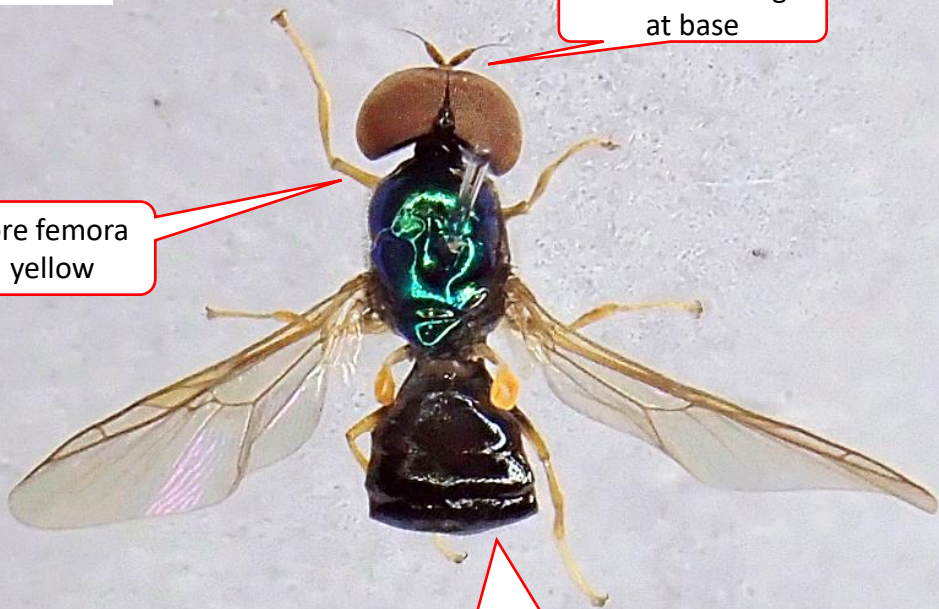
© Steven Falk



© Martin Harvey

antennae orange at base

fore femora yellow



abdomen black, contrasting with green thorax

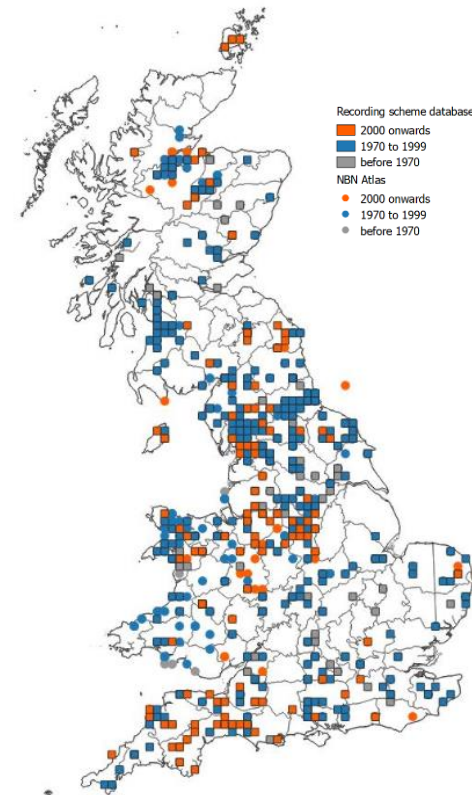
***Microchrysa cyaneiventris* (Black Gem) - MALE**



[iRecord link](#)

© Per Smiseth via iRecord

- ID difficulty: 2
- Flight period: May to Sep, peak in late Jun to mid Jul
- GB threat: Least Concern
- widespread
- woodland edge, hedgerows, isolated trees and bushes
- No. of records: 767 • % since 2000: 21%



[iRecord link](#)

© Alastair Forsyth via iRecord



mid-femora yellow or with faint dark ring, paler than ring of hind femora



© Martin Harvey



© Malcolm Storey / Biolimages

[Biolimages link](#)

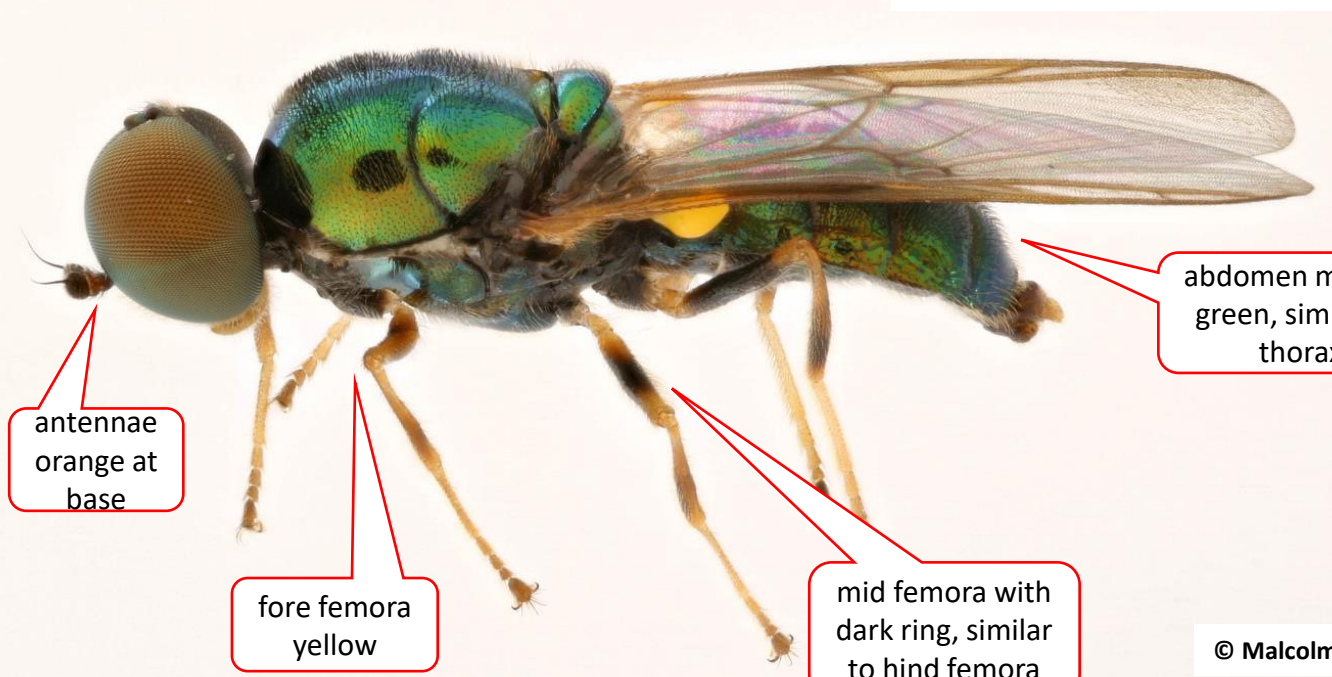


© Janet Graham

[Janet Graham link](#)

- ID difficulty: 2
- Flight period: early May to Sep, peak in mid Jun to mid Jul
- GB threat: Least Concern
- widespread
- woodland edge, hedgerows, isolated trees and bushes
- No. of records: 1200 • % since 2000: 31%

Microchrysa flavicornis (Green Gem) - MALE



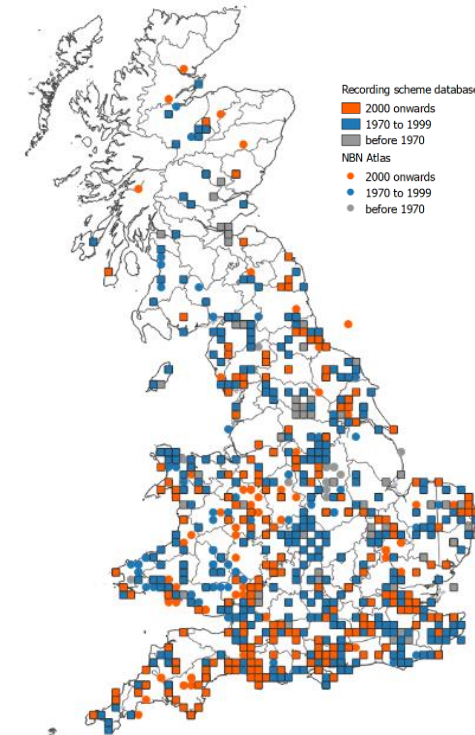
antennae orange at base

fore femora yellow

mid femora with dark ring, similar to hind femora

abdomen metallic green, similar to thorax

© Malcolm Storey / Biolimages



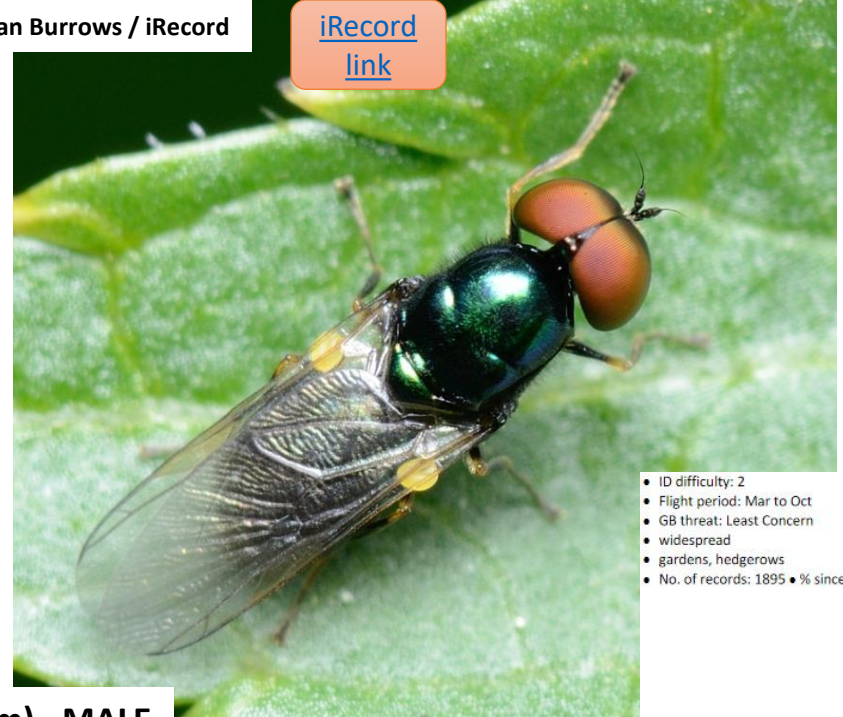


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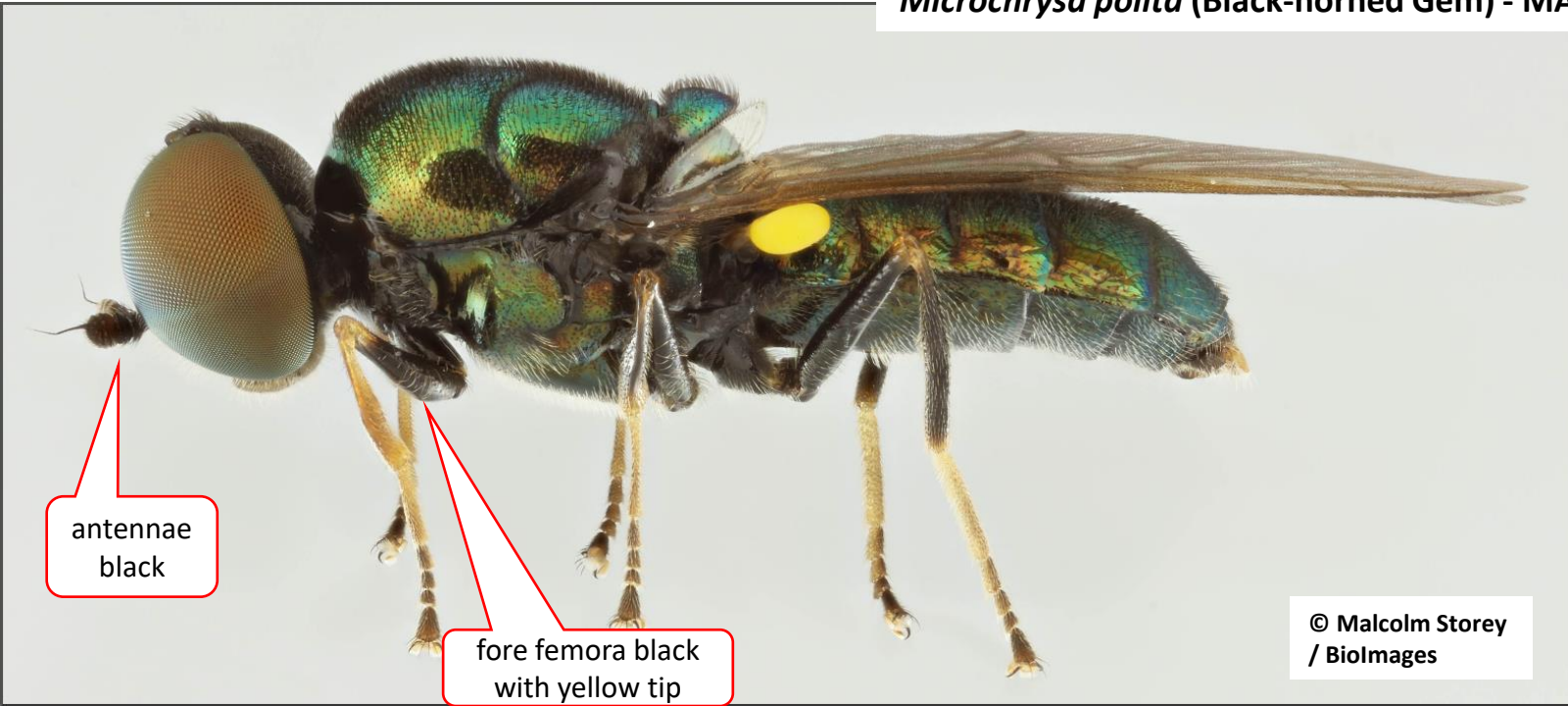
© Allan Burrows / iRecord

[iRecord link](#)



- ID difficulty: 2
- Flight period: Mar to Oct
- GB threat: Least Concern
- widespread
- gardens, hedgerows
- No. of records: 1895 • % since 2000: 39%

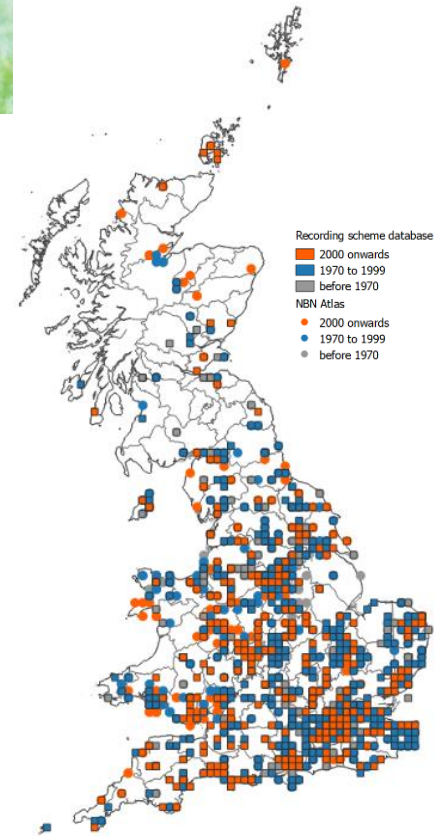
***Microchrysa polita* (Black-horned Gem) - MALE**



antennae black

fore femora black with yellow tip

© Malcolm Storey / Biolimages



© Steven Falk

[Steven Falk link](#)



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broad, flat abdomen (usually blueish in female)

***Chloromyia formosa* (Broad Centurion) - FEMALE**

eyes hairy

purple eye-stripe

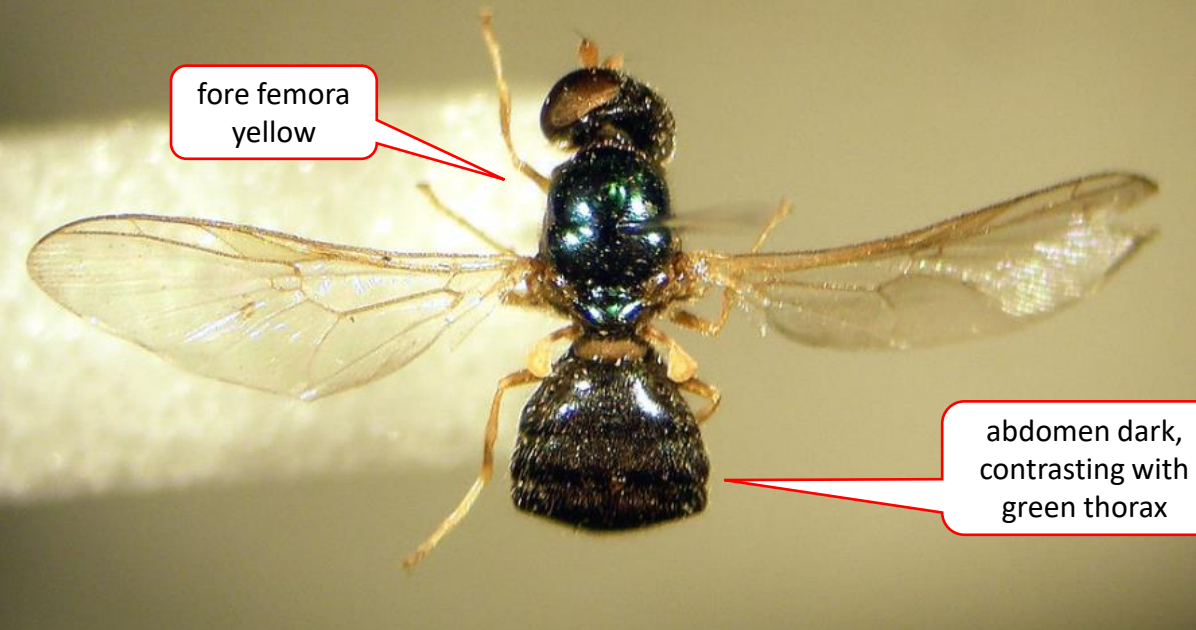
dark legs with yellow 'knees'



© Ian Andrews



© Ian Andrews



fore femora yellow

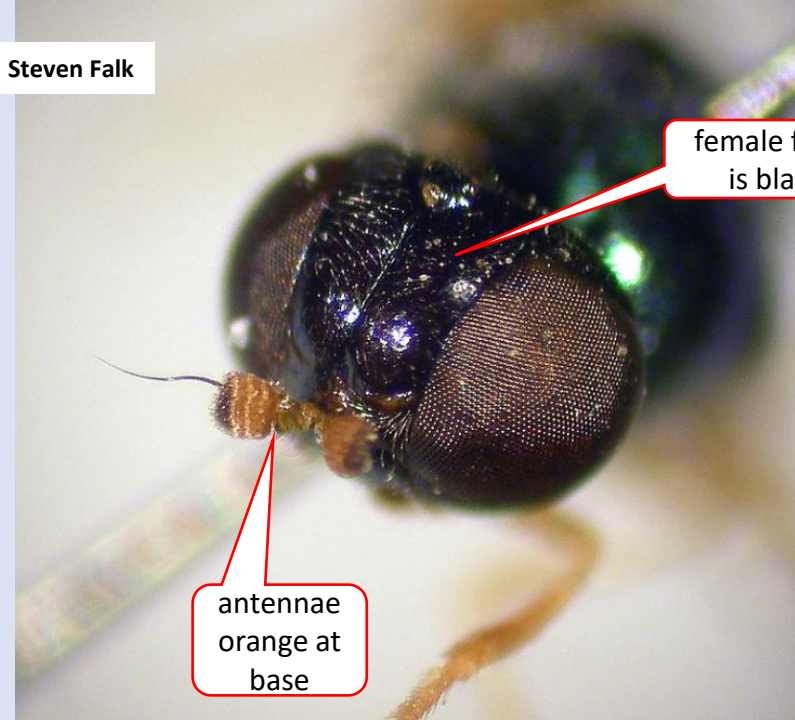
abdomen dark, contrasting with green thorax

Microchrysa cyaneiventris (Black Gem) - FEMALE



mid-femora yellow or with faint dark ring, paler than ring of hind femora

[iRecord link](#)

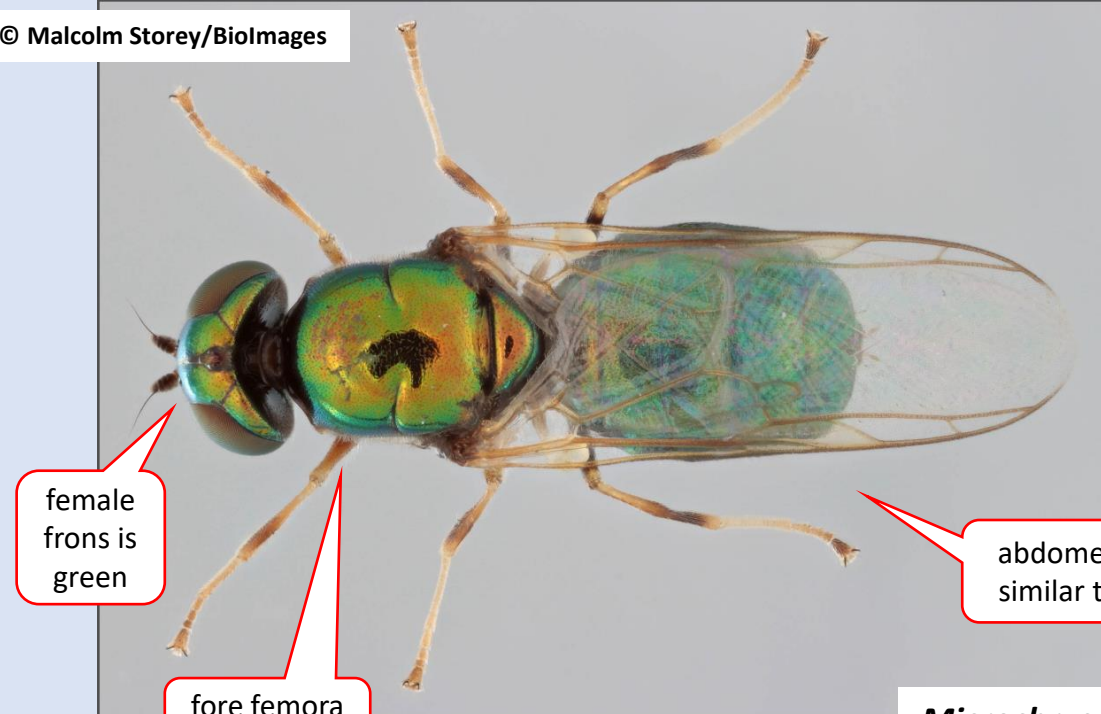


female frons is black

antennae orange at base

[Steven Falk link](#)





female frons is green

fore femora yellow

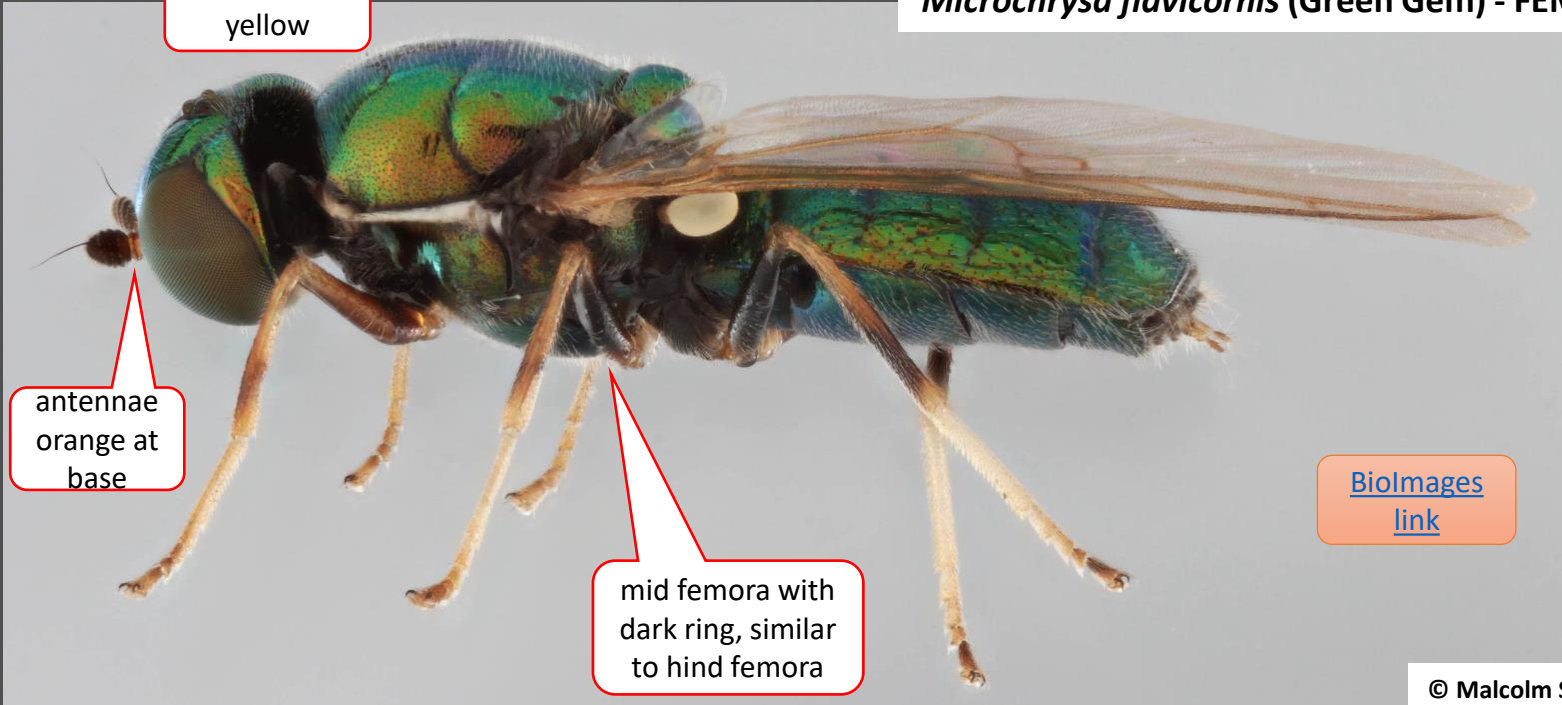
abdomen green, similar to thorax



white stripe on side of thorax

[Steven Falk link](#)

***Microchrysa flavicornis* (Green Gem) - FEMALE**



antennae orange at base

mid femora with dark ring, similar to hind femora

[Biolmages link](#)



© Malcolm Storey/Biolmages

fore femora black with yellow tip



[Biolmages link](#)

© Steven Falk



no prominent white stripe on side of thorax

[Steven Falk link](#)

Microchrysa polita (Black-horned Gem) - FEMALE

© Malcolm Storey/Biolmages

antennae black

