Identifying soldierflies and allies: snipeflies in genus *Rhagio*

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

Version 1 at 29 February 2020

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 <u>BioImages website</u> – Steven Falk's <u>photo collections on Flickr</u>

Other photographers included in this guide are Geir79, George Tordoff, Ian Andrews, Martin Harvey and Simon Knott.

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 <u>British</u> <u>soldierflies and their allies</u>, by Alan Stubbs and Martin Drake. See also the recording scheme's <u>additional notes</u> to accompany the Stubbs and Drake keys.

For lots more information on soldierflies and allies go to the recording scheme <u>website</u>, <u>Twitter</u> page or <u>Facebook</u> 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 <u>iRecord</u> or send to the <u>recording scheme</u> 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: Rhagio

wing photos © Malcolm

stigma

dark

stigma

or lacking

Genus *Rhagio* contains six medium to large species (5.5–14mm long). They have the typical long legs and broad wings of the snipefly family, and all are a combination of yellow and black. Wing venation helps to separate *Rhagio* species from snipeflies in genus *Chrysopilus*, and wing markings help to separate the species of *Rhagio*.

wings with dark stigma <u>and</u> grey clouding =

- R. scolopaceus (common) or
- R. strigosus (rare)

wings with dark stigma only =

- R. lineola (common) or
- R. notatus (rare)



Storey / BioImages

stigma pale or

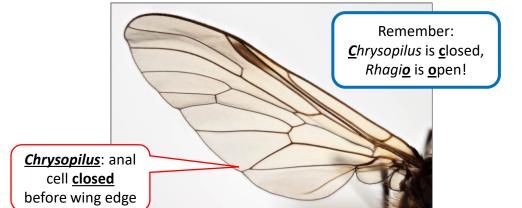
wings with stigma pale or lacking =

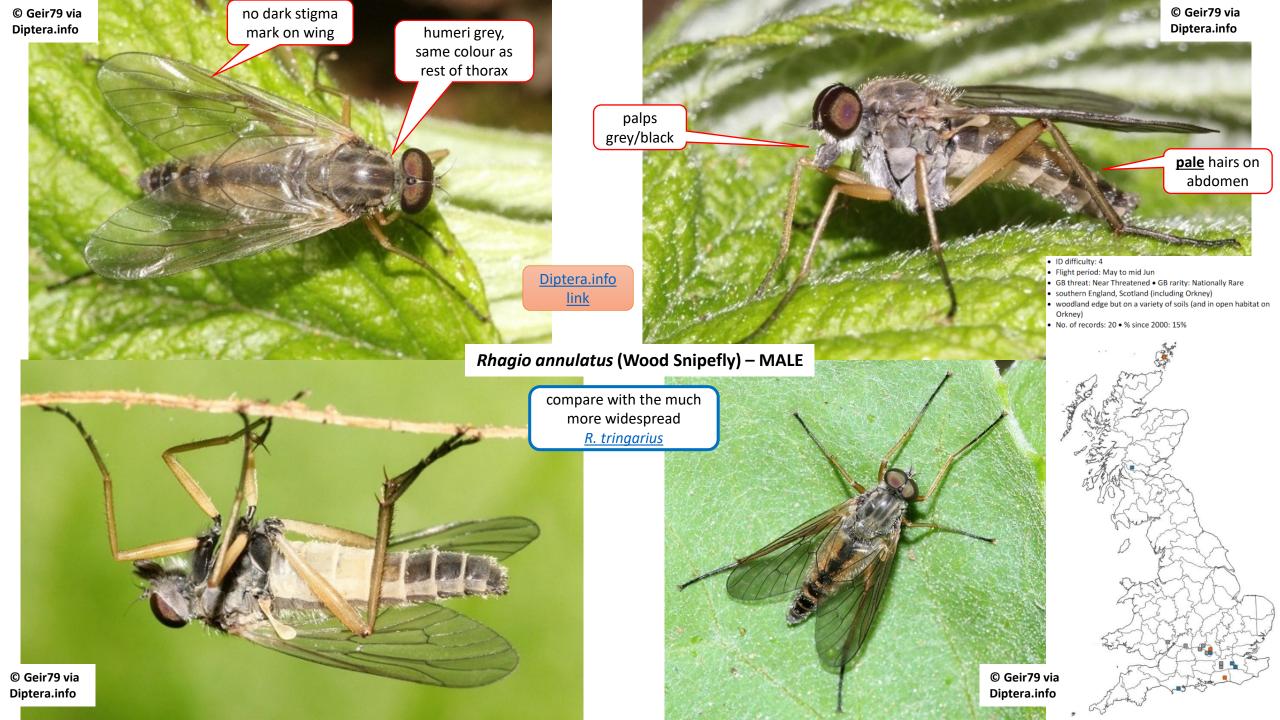
- R. tringarius (common) or
- R. annulatus (rare)

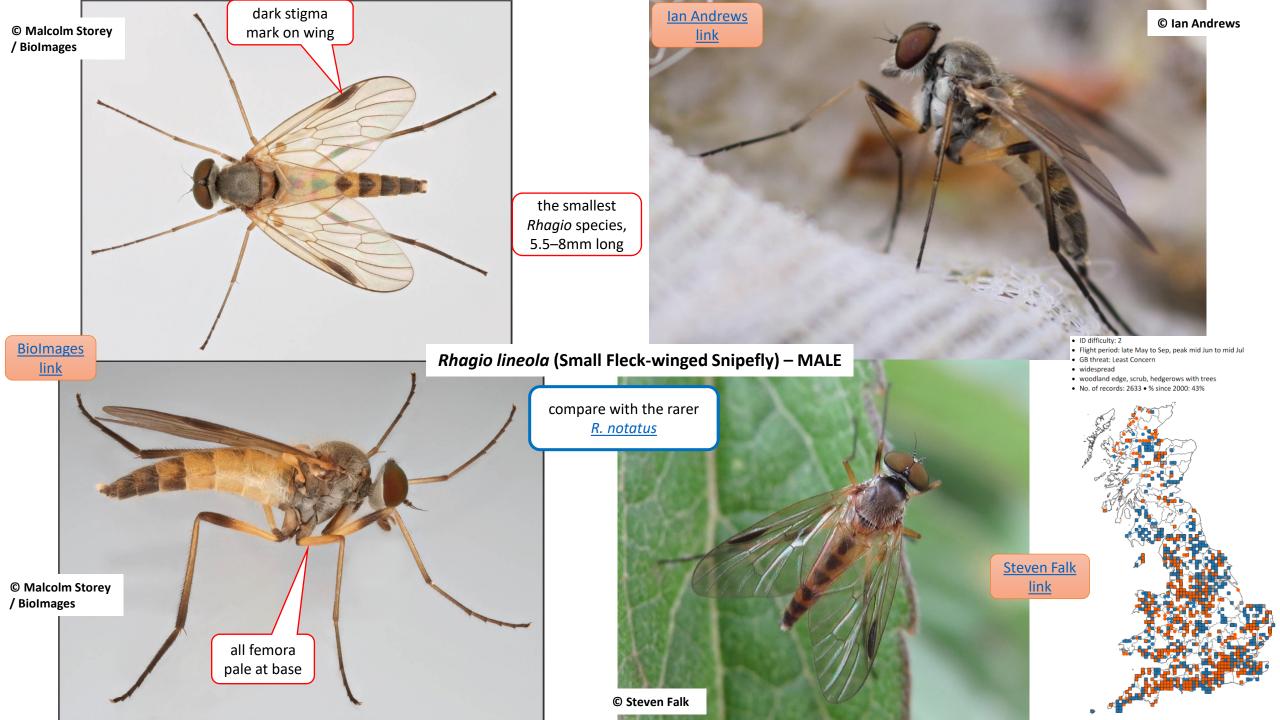
All <u>Rhagio</u>: anal cell open at wing edge Males and females are fairly similar in appearance but can be distinguished by their eyes (male eyes meet at top of head, female eyes have a narrow gap at top of head).

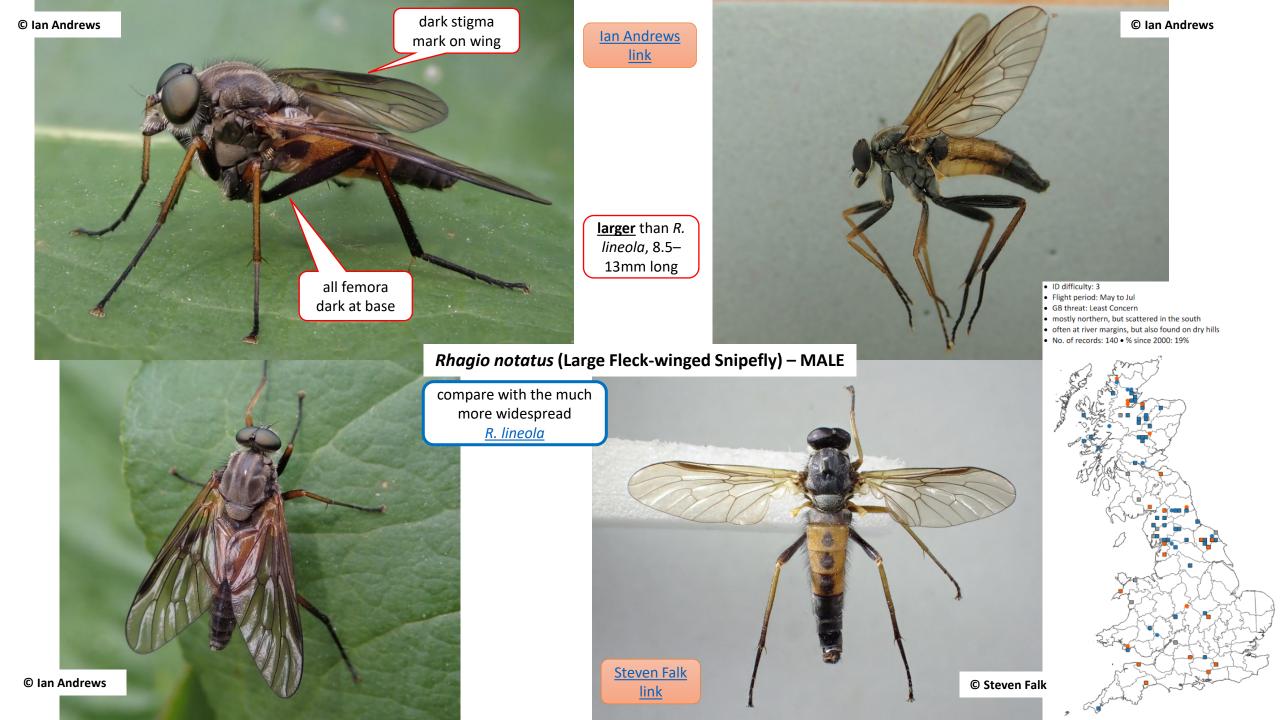
Three of the species (*R. lineola*, *R. scolopaceus* and *R. tringarius*) are common and widespread, the latter most numerous in damp meadows and wetlands. The other three (*R. annulatus*, *R. notatus* and *R. strigosus*) are all rare. The reasons for this are poorly understood, and in fact the ecology of snipeflies in general is not well-known.

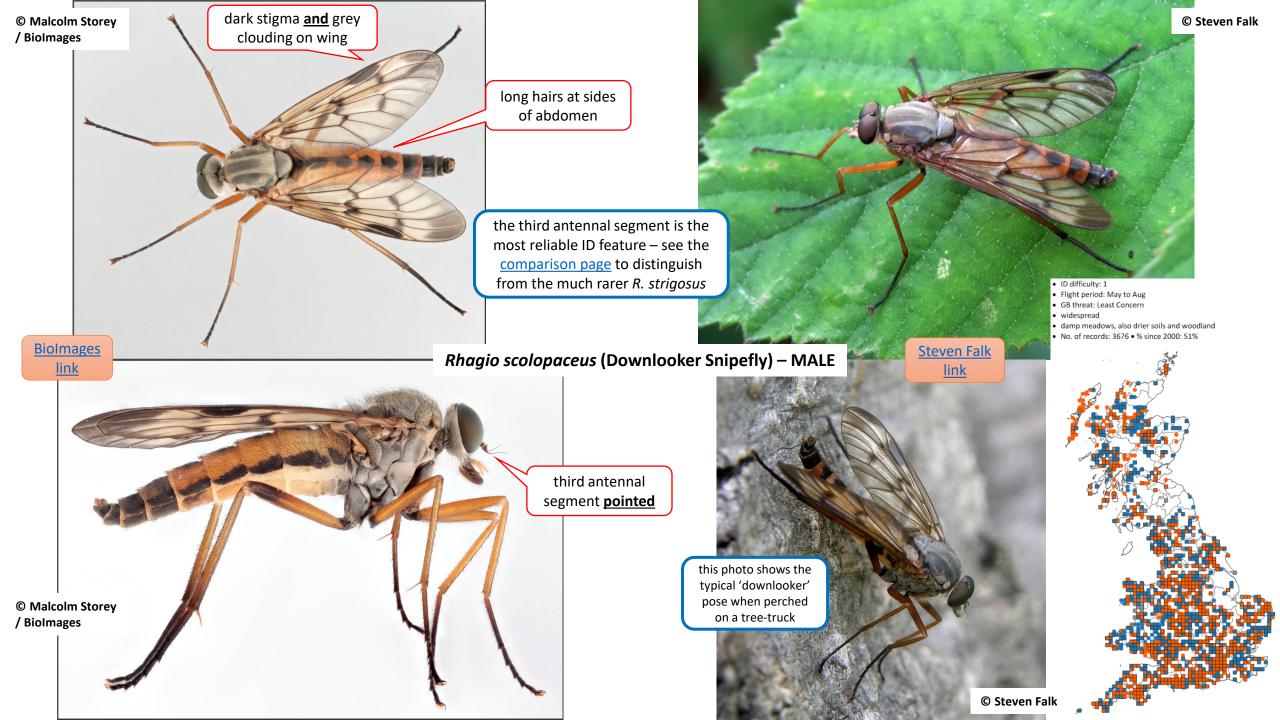












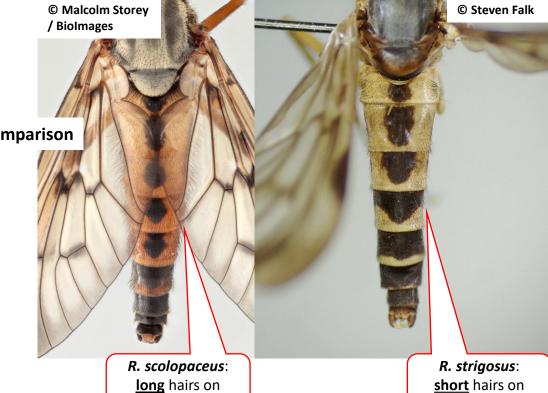
R. scolopaceus is widespread throughout Britain in many habitats

R. scolopaceus: third antennal segment **pointed**

1 mm

There are some other differences that can give clues as to which species you have, but these are not as reliable as the antennae:

	R. scolopaceus	R. strigosus
Sides of thorax	grey	grey or yellowish in strigosus (females are usually yellower than males)
Abdomen segment 4 (tergite 4)	long hairs on sides	short hairs on sides
Main flight periond	early May to early August, peak in early June	early June to early September, peaking in early July



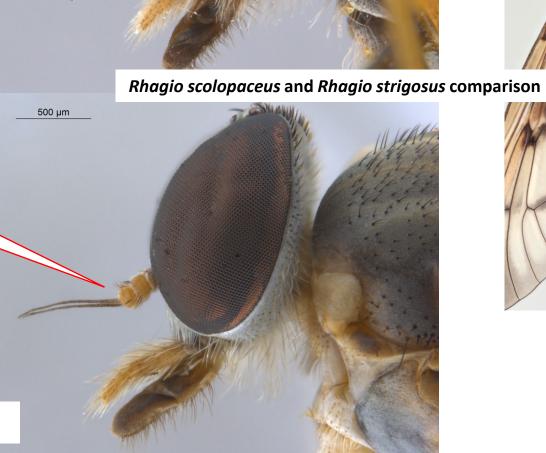
sides of abdomen

sides of abdomen

R. strigosus: third antennal segment rounded

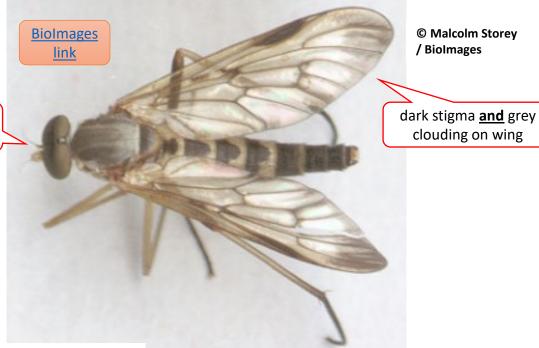
R. strigosus is only known from chalk areas of Surrey, Berkshire and Oxfordshire

Photos © Martin Harvey / Oxford University Museum of Natural History





third antennal segment rounded



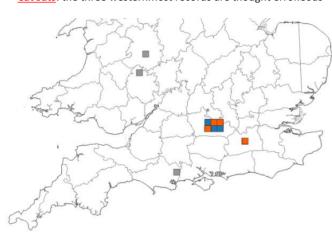
Rhagio strigosus (Yellow Downlooker Snipefly) – MALE

the third antennal segment is the most reliable ID feature – see the comparison page to distinguish from the much more widespread R. scolopaceus

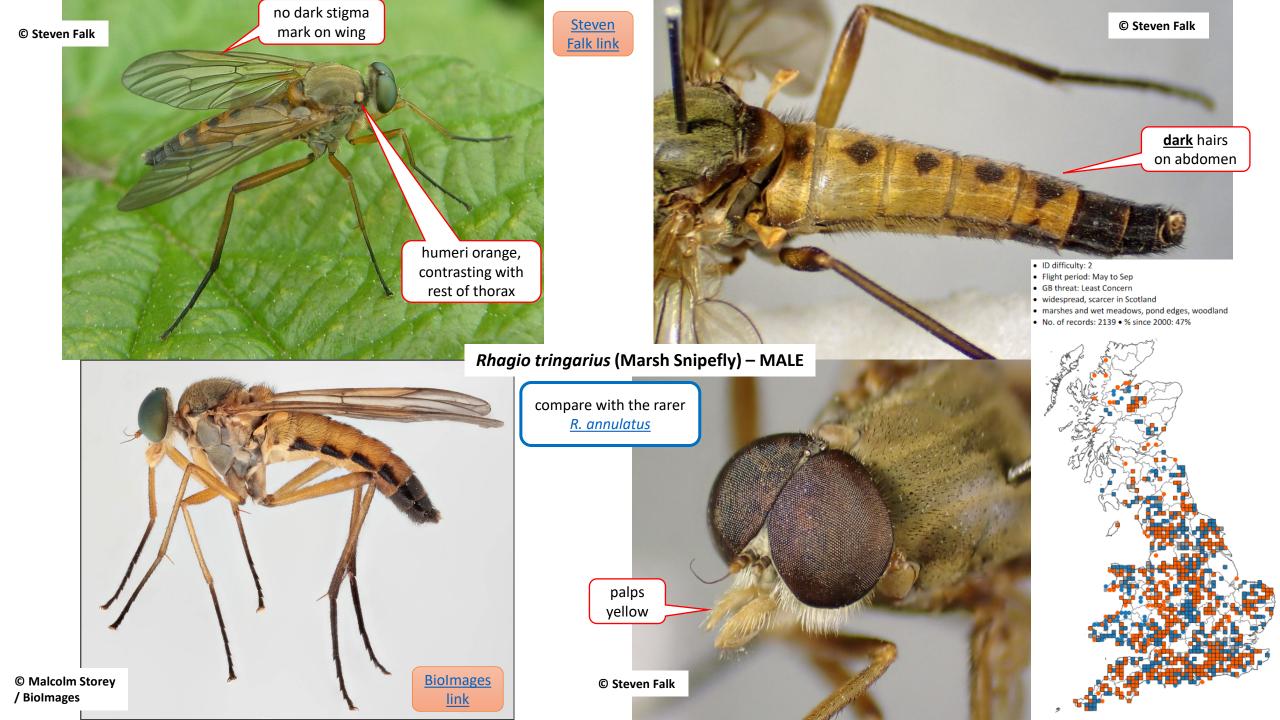
- ID difficulty: 4
- Flight period: Jun to mid Sep, peak Jul
- GB threat: Vulnerable GB rarity: Nationally Rare
- southern England (Chilterns, North Downs)
- woodland edge, also isolated trees and telegraph poles, in calcareous areas

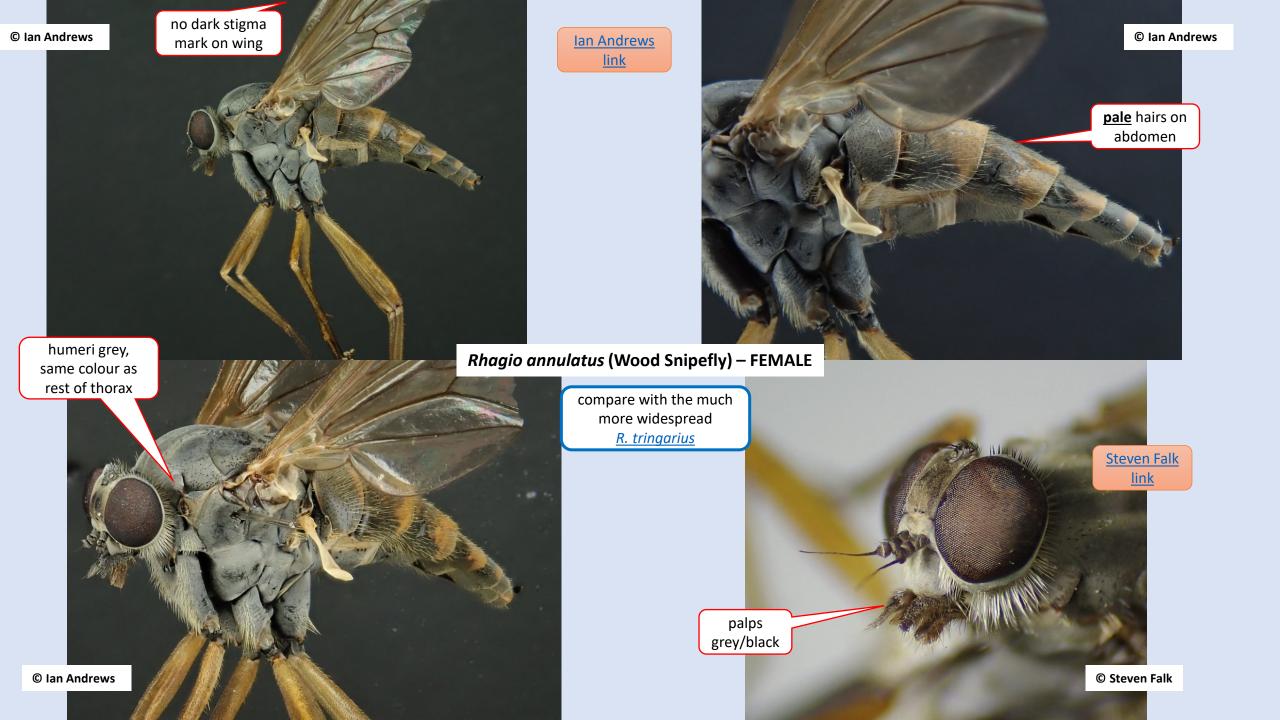
© Malcolm Storey / BioImages

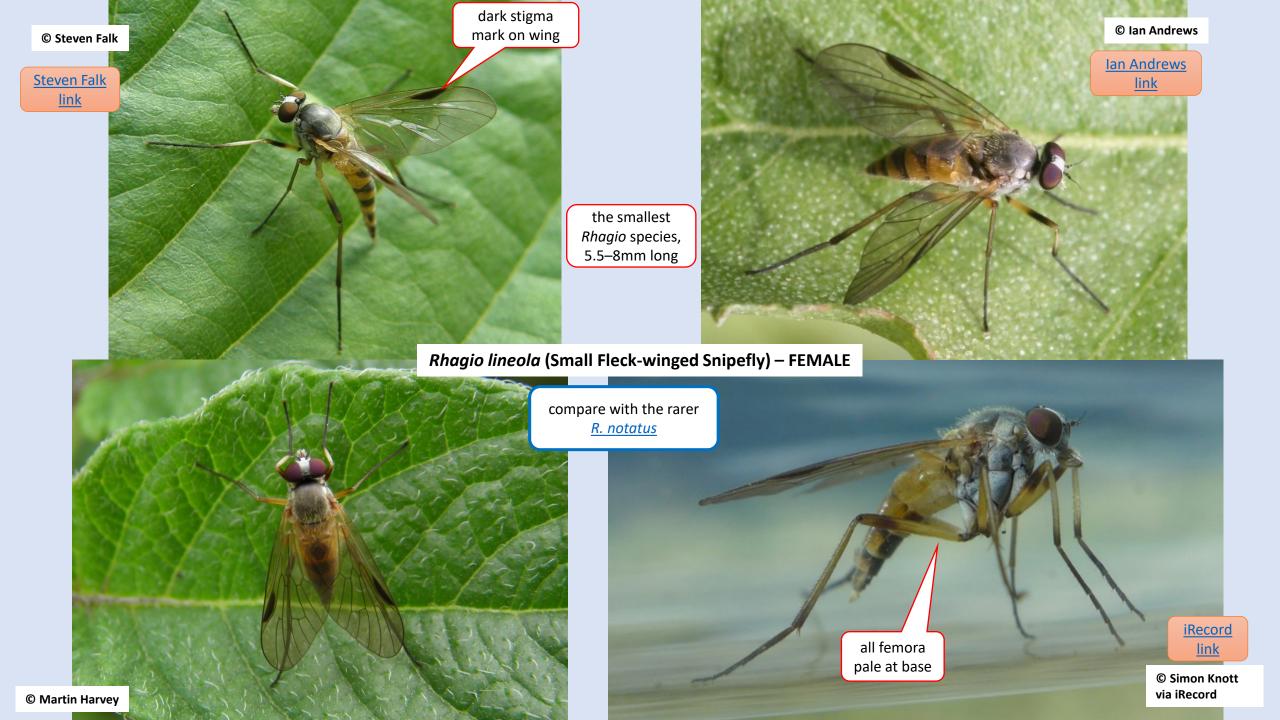
- No. of records: 153 % since 2000: 29%
- Caveats: the three westernmost records are thought erroneous

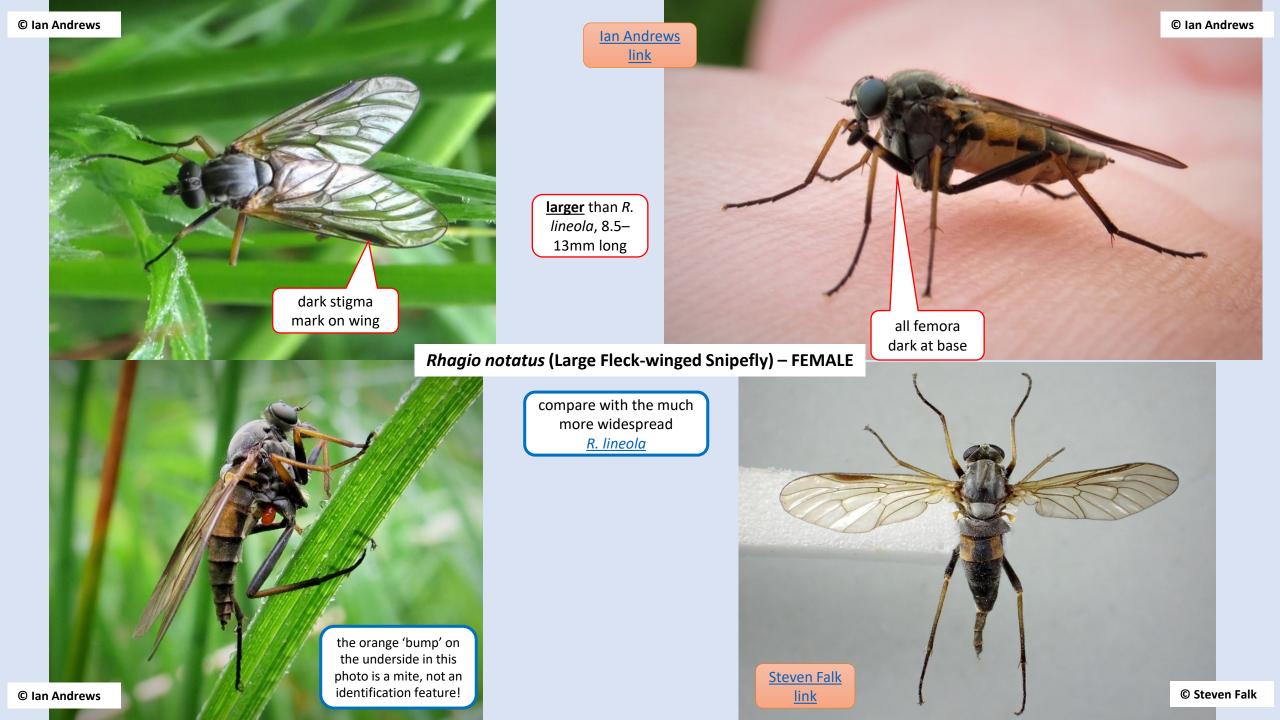


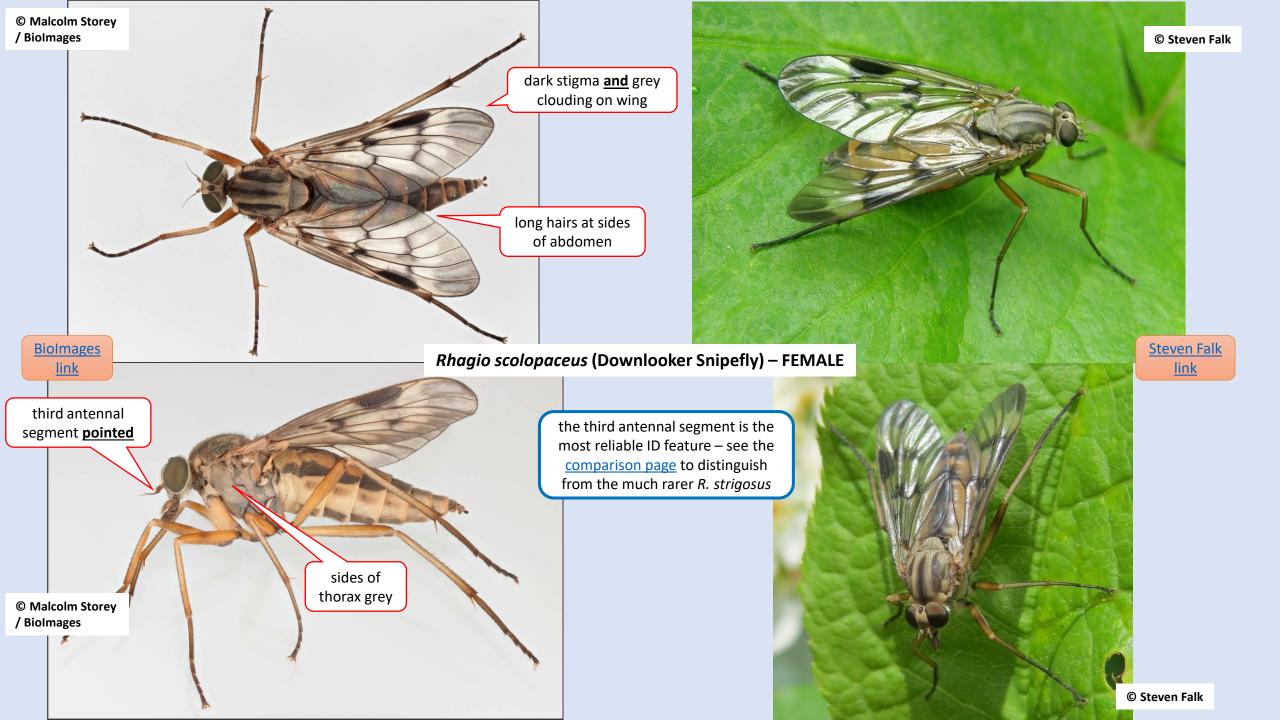
short hairs at sides of abdomen

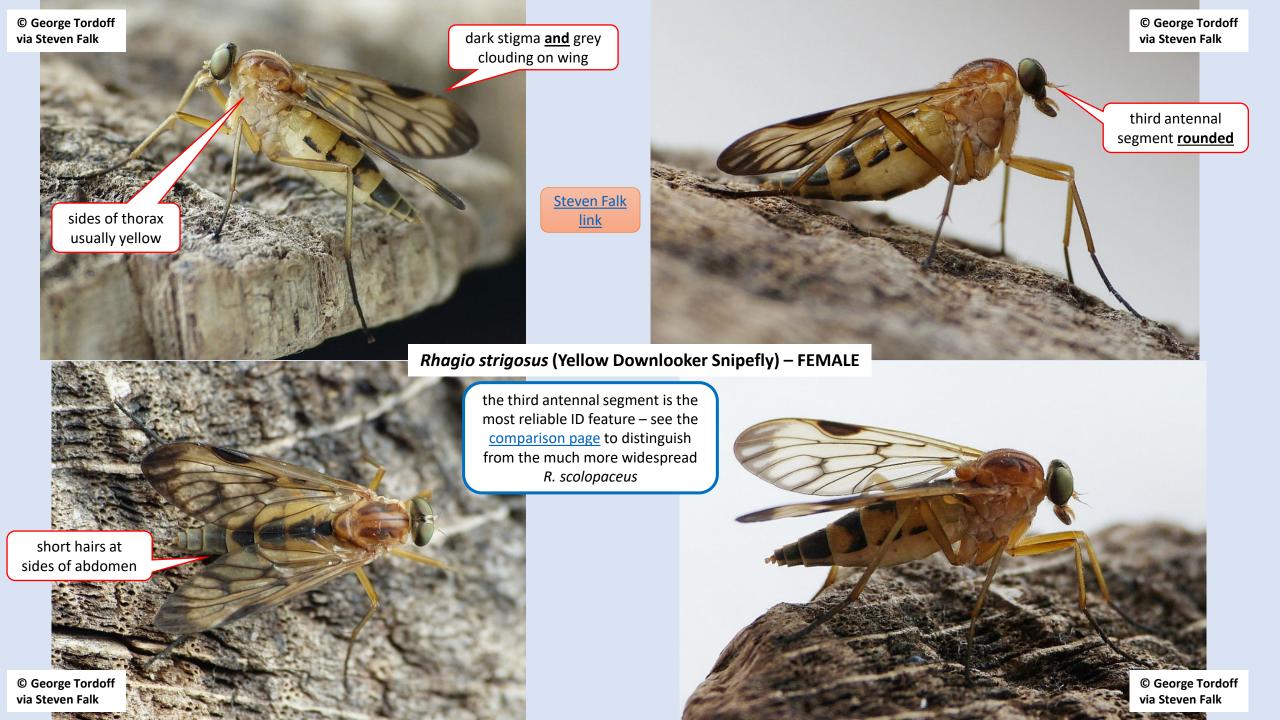












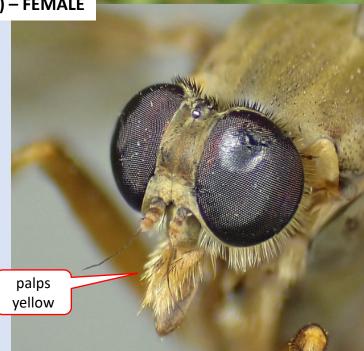




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compare with the rarer R. annulatus

> Steven Falk link



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<u>dark</u> hairs on abdomen