

# Soldierflies and Allies Recording Scheme

## Newsletter 12, spring 2026

Edited by Martin C. Harvey  
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*Silver Colonel, Odontomyia argentata, was recorded from Cheshire in 2025, the first record for the vice-county. Photo by Kevin Hitch via iRecord. CC BY.*

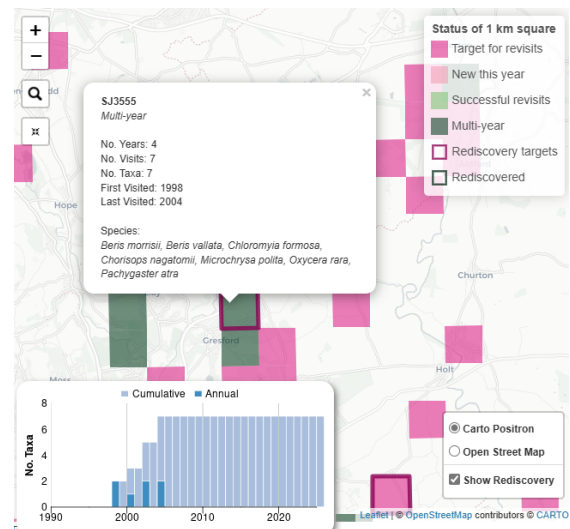
Our 2026 newsletter includes exciting news of a possible new bee-fly species in the UK, as well as an exotic imported soldierfly.

Also some intriguing soldierfly observations from Yorkshire, plus updates from the recording scheme and Bee-fly Watch. See below for some forthcoming webinars and a training event in Northamptonshire.

### Targeting revisits in 2026

For the last few years soldierflies have been one of the species groups included in the [“Targeting Revisits” project](#) from the UKCEH Biological Records Centre. This provides a map showing where soldierflies have been recorded, and in particular highlighting the squares that were recorded once in the past but have not been revisited more recently.

During 2025 further updates were made to this system, and it now contains additional information on squares that were previously species-rich for soldierflies, but that have not been recorded very recently.



### Training events in 2026

Online entoLEARN webinars from the Biological Recording Company:

- **Bee-flies**, Wednesday 25 March, 6 to 7:30pm, with Dr Tony Madgwick – [booking details](#)
- **Soldierflies**, Thursday 16 April, 6 to 7:30pm, with Martin Harvey – [booking details](#)
- **Robberflies**, Thursday 8 October, 6 to 7:30pm, with Martin Harvey – [booking details](#)



In-person training workshop from the Wildlife Trust for Beds, Cambs and Northants:

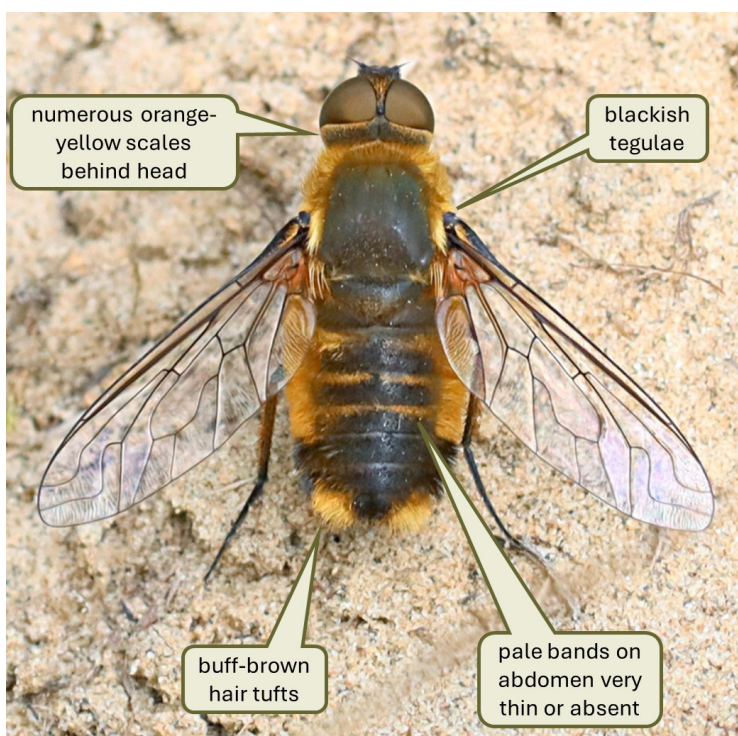
- **Learn how to identify soldierflies** using keys, specimens, and microscopes, Saturday 16 May, 10am–4pm, Old Sulehay reserve near Peterborough, with Martin Harvey – [booking details](#)

For more fly-related events and workshops see the [Dipterists Forum events page](#)

## A new *Villa* bee-fly in the UK?

by Martin Harvey

Among the iRecord records in 2025 was one for Dune Villa (*Villa modesta*), but at a site inland. All recent records of Dune Villa have been in coastal dune habitats, so this looked like an intriguing new site. It had been recorded by Penny Metal on 22 August 2025 near Dartford (vice-county West Kent). The excellent photo accompanying the record shows a male *Villa* bee-fly that did not match well for *V. modesta*. Comparison with recent Dutch and Swiss identification guides suggested that this could be *V. hottentotta*, a species not previously recorded in the UK.



Male *Villa hottentotta* on sandy soil at Braeburn Park in south-west London. Photo by Penny Metal.

An online search produced another potential UK record, one that had been added to the Dutch “observation.org” system. This was a female, recorded as *V. hottentotta* by Richard Watkins on 10 June 2025 at Dungeness (East Kent), and identified with the help of the website’s image recognition tools. After further checking on iRecord, a third record was found, again of a male under the name *V. modesta*, by Paula Young on 16 June and from near Deal on the East Kent coast.

At this point a word of caution is needed. *Villa* is a difficult genus, with species that exhibit some variation, and with markings made up of scales and hairs that can become worn away. And there is still some taxonomic uncertainty over the species found in Europe. So although we now have three good candidates for *V. hottentotta* in the UK, we do need to find some specimens to back this up and ensure that

it can be formally documented and published. Hopefully this will be possible if the bee-fly is found again in 2026.

So please do look out for it next summer! *V. hottentotta* is a species that has become more frequent in the Netherlands in recent years, and is also frequent in Scandinavia, so it could become widespread in the UK. It likes sandy soils, but has been found in a range of grasslands, brownfield sites and gardens as well as in coastal habitats. It is a parasitoid of noctuid moth caterpillars, and has been reared from a species including Large Yellow Underwing and Heart and Dart, both of which are common in the UK.

If this new bee-fly gets established in the UK, it will make our lives harder when identifying and recording *Villa* bee-flies! Up until now, we have been helped by the different species

The habitat at Braeburn Park in which the above bee-fly was seen. Photo by Penny Metal.



preferring different habitats, with Dune Villa (*modesta*) confined to coastal sand dunes, Downland Villa (*cingulata*) preferring chalk and limestone grassland, and Heath Villa (*venusta*) being a heathland species that is apparently extinct. However, Downland Villa has been expanding into neutral and acid grasslands, and the potential habitats for *V. hottentotta* could overlap with both the Downland and the Dune species.

Records made in the field will need to be supported by good quality photos of fresh individuals, showing the abdomen patterns, the head, and the tegulae (flaps at the base of the wings). The recording scheme's identification guide for Villa bee-flies has been updated to include details of what to look for, and can be downloaded from the [recording scheme website](#). If you do find *V. hottentotta* in 2026 I would be grateful if specimens can be retained and sent to me.

Thanks to John Smit, Keith Porter and David Gibbs for help and advice, and to Penny Metal, Richard Watkins and Paula Young for sharing records and photos.



The first of the three records in 2025 was this female on 10 June at Dungeness. Females are less distinctive than the males, with broad yellowish bands on the abdomen, as well as a buff 'tail'. Photo by Richard Watkins via observation.org.

### Buff-tailed Villa: an English name for *Villa hottentotta*

The name "*hottentotta*" was given to this species by Linnaeus, and it is not clear why he chose this. The word "hottentot" has been used with racist intent and is considered offensive, and after discussion with Steven Falk we propose that the English name for this species should be "Buff-tailed Villa". This refers to the hair tufts at the tip of the abdomen, which are buff-coloured in this species, but closer to white in the others in the genus (at least when specimens are fresh).



The first fly found indoors. Photo by David Pickens.

### An unusual soldierfly from a houseplant

In March 2025 David Pickens found a soldierfly in his house, and posted the photo on the Facebook soldierflies group asking for help with identification. He commented that he had recently bought some new *Dracaena* houseplants, and wondered if the fly might have been brought in with them. Thanks to Martin Hauser and Diego Aguilar Fachin this was identified as a soldierfly in genus *Merosargus*, which is native to North and South America. As far as I'm aware that genus has not previously been found in the UK, although there are a couple of recent records of it being imported into the Netherlands.

One of the reared specimens. Photo by Martin Harvey.

Further progress was made when David was able to rear two further specimens from his *Dracaena* plant. These were sent to me and allowed for more detailed photos to be passed to Diego Aguilar Fachin, who was able to confirm it as *Merosargus stamineus*. It seems very unlikely that this is a species that could establish itself in the UK, as it is thought to need higher temperatures, but it will be interesting to see if the houseplant trade results in further introductions in future.



## A possible polar gynandromorph *Oxycera nigricornis*

by Ian Andrews

*Oxycera nigricornis* is a common aquatic soldierfly associated with springs, calcareous fens, woodland seepages and similar, and one I find regularly around fen seepage sites on the North York Moors. Through much of June and July, it is not uncommon in a couple of hours to sweep 30+ from plants such as *Juncus* spp. and *Pedicularis palustris* on and around seepages, and from shrub vegetation of *Salix* surrounding the fens. On 24 June 2025, while sweeping many *Oxycera nigricornis* and *pygmaea* of both sexes, I took a small soldierfly which I assumed to be male as it had holoptic eyes, but I did not recognise the species as the thorax had extensive yellow markings on the dorsum; so, I potted it up to look at when back home.



Normal female *Oxycera nigricornis*,  
North York Moors 15 July 2013



Possible polar gynandromorph *Oxycera nigricornis*,  
North York Moors, 24 June 2025



Normal male *Oxycera nigricornis*,  
North York Moors, 29 June 2013

Under the microscope, it was apparent that the head was in fact normal for a male *Oxycera nigricornis*, with holoptic eyes, black vertex and occiput. However, the rest of the fly was clearly morphologically a female *Oxycera nigricornis*, with the normal female thoracic pattern of broad, yellow lateral patches over the notopleura, bending inwards to form two narrow yellow stripes, which bulge to form small semicircles behind the suture. The abdomen also had more extensive yellow lateral markings and the genitalia were normally formed for a female. The body length was 4.2 mm. I first assumed it was an intersex individual, but Martin Harvey suggested it may more likely be a gynandromorph\*, since there appeared to be a distinct demarcation between male and female structures, rather than a gradation between male and female features. The distinction is not necessarily an easy one, but it seems more likely that this is a gynandromorph, and because the distinction between male and female is back to front, rather than side to side, it appears to be an uncommon polar gynandromorph.

\* According to Craig & Crosby 2008, "Heming (2003), amongst others, defines a 'gynandromorph' as an individual in which some parts of the body are male and some female, with the boundary between such parts abrupt, whereas an 'intersex' is an individual with the junction between male and female parts diffuse."

- Craig, D.A., and Crosby, T.K. 2008. Gynandromorphs of New Zealand *Austrosimulium* spp. (Diptera: Simuliidae). *Zootaxa* 1811: 57–68.
- Heming, B.S. 2003. *Insect development and evolution*. Cornell University Press. New York. 444 pp.

Side view of the possible polar gynandromorph.  
All specimen photos by Ian Andrews.



## *Oxycera pardalina* ovipositing into flower head of Common Cotton-grass

by Ian Andrews



Female *Oxycera pardalina* ovipositing, North York Moors, 8 July 2025. Photos (above and opposite) by Ian Andrews.

*Oxycera pardalina* is a Nationally Scarce soldierfly, associated with calcareous springs and streams mainly in the north, whose larvae develop within mosses on and around seepages. It can be swept in small numbers most years on different calcareous fen sites across the southern North York Moors. On 8 July 2025, at a fen site (vegetation community M13) within Dalby Forest, a small area of seepages surrounded by mature Alder (*Alnus glutinosa*) and *Salix* scrub, a female was observed landing on the head of a Common Cotton-grass (*Eriophorum angustifolium*) plant. The plant was growing at the bottom of a slope, within slow-flowing seepage runnels, over open, shallow water and *Palustrella* moss, alongside plants including Marsh Lousewort (*Pedicularis palustris*) and sedges *Carex* spp.

The soldierfly spent some 15 minutes on the plant, constantly moving around the head and repeatedly pushing its extended ovipositor within the

white seed heads and upper leaf sheaths. Eggs were seen to be laid a couple of times, but it was not possible to get close enough to examine them in detail for fear of disturbing delicate habitat. Much of the time it appeared to be testing out possible sites, extending the ovipositor, but not actually placing an egg.

The position of the plant over warm, shallow runnels and *Palustrella* moss suggested that any larvae hatching from the eggs laid would simple be able to drop down straight into the saturated moss within which they would develop.



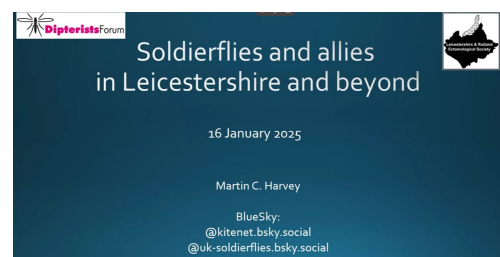
## Soldierflies and allies in the entomological press

Recent issues of the Dipterists Forum *Bulletin* have included several informative articles and updates relating to soldierflies and allies.

- *Odontomyia angulata* (Orange-horned Green Colonel), by Judy Webb (Bulletin 99: 18)
- Soldierfly study update, by Judy Webb (Bulletin 99: 18)
- *Odontomyia hydroleon* (Green-barred Colonel) ... a conservation update, by Ian Andrews (Bulletin 100: 27–28)
- Cothill Fen flies, by Judy Webb (Bulletin 100: 28–29)
- Flies on grazing marshes, by Martin Drake (Bulletin 100: 42–43)

The most recent online recording of a recording scheme webinar was made in January 2025:

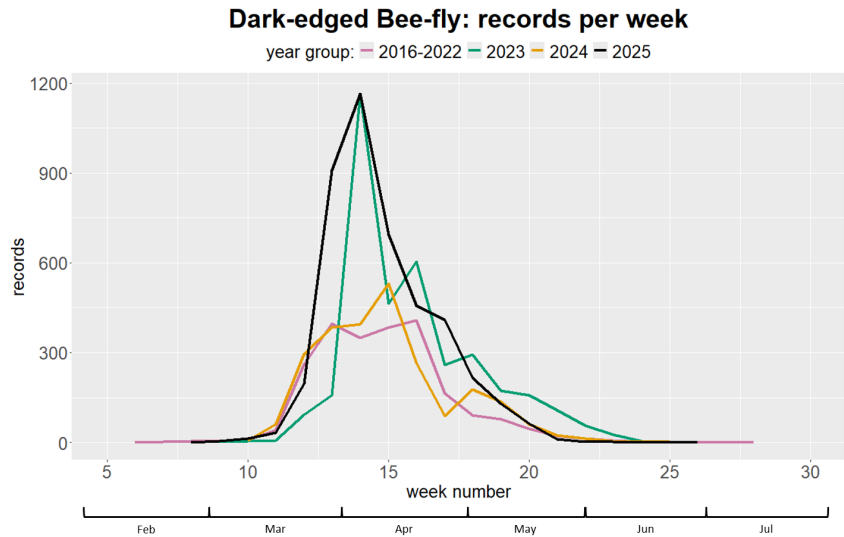
- Soldierflies and Allies in Leicestershire and beyond, by Martin Harvey for the Leicestershire and Rutland Entomological Society ([available on YouTube](#))



## Recording scheme updates

Last year (2025) is on track for a total of well over 10,000 records again, in line with all years since 2020. Spring 2025 was much warmer and drier than spring 2024, and we saw a welcome recovery in reports of some of the spring species. After a very disappointing year in 2024, records for Bee-fly Watch bounced back in 2025, returning to a peak of almost exactly the same level as in 2023.

Rather astonishingly, **Dark-edged Bee-fly** (*Bombylius major*) is still being found in new places, with a first county record in 2025 for the south-west Scottish vice-county of Wigtownshire, and a first record since 1917 in the Clyde Isles vice-county slightly further north. In addition, new 10 km square records continued to accumulate, with a particular influx from the Cheshire area, see map on next page.



**Dotted Bee-fly** (*B. discolor*) also added several new 10 km squares on the edges of its range, and jumped into mid Wales with a first vice-county record for Breconshire.

The timing of bee-fly flight periods in relation to climate warming has been the subject of analysis during 2025, using Bee-fly Watch data, and a research paper by John Bloomfield and colleagues is in review. This will take a detailed look at how flight periods have changed and we look forward to sharing the results when possible.

**Tree Snipefly** (*Chrysopilus laetus*) continues to spread, with a new vice-county record in Cheshire and several new 10 km squares (see map on next page). Several records in recent years (usually of female flies) have come from inside people’s houses. Tree Snipefly has larvae that develop in dead wood, and my speculation is that the females seek out enclosed shady areas when looking for suitable sites to lay eggs, resulting in houses being mistaken for shady woodlands or even hollow trees.

Over the last few years Christopher Antoniou has been successful in rearing Tree Snipefly from larvae found in well-rotted wood in damp riverine woodland in Middlesex. This adds to an increasingly wide

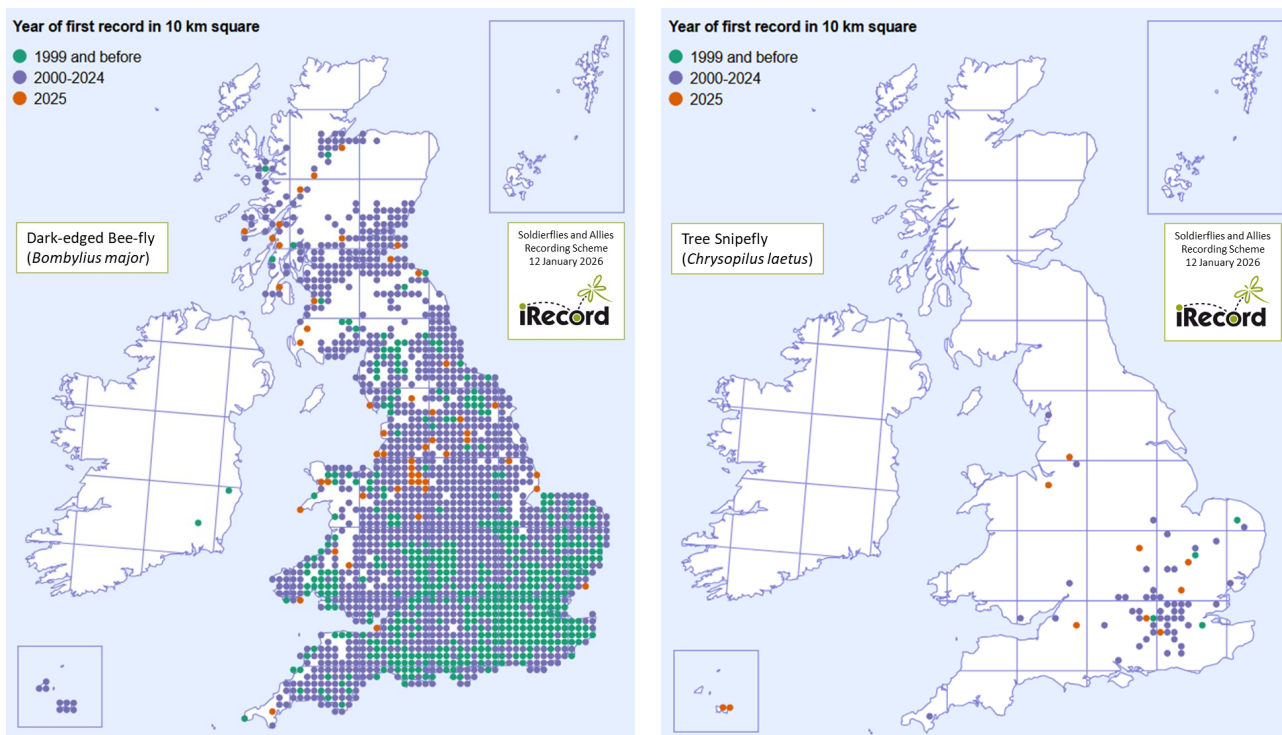
One of the Tree Snipefly larvae successfully reared to adult stage by Christopher Antoniou. Photo by Christopher Antoniou (CC BY-NC) via iNaturalist.



range of dead wood microhabitats from which this fly has been recorded.

### Range expansion and increased recording

In 2025 there were just under 90 records that appear to represent first vice-county sightings, spread across 57 species. These are similar numbers to the new vice-county records for both 2023 and 2024. In some cases the new records are for species that are definitely expanding their range (assumed to be the result of climate change), while in others the more likely



Each year we continue to get new 10 km square records for Dark-edged Bee-fly, and in 2025 a fairly large gap in the range around Cheshire got filled in. It's difficult to know if this represents an increase in range or more recording in that area.

Tree Snipefly continued to spread to new areas in 2025, consolidating its spread to north-west England and filling in gaps elsewhere.

explanation is just that there has been more recording in areas previously lacking records. In any case, it seems that there is still plenty of room for new discoveries to be made!

### Thanks to all recorders

In 2025 the recording scheme received records from over 2,500 people, an increase on the year before. Thanks to everyone who has sent in one or more records, whether this is via iRecord, via iNaturalist or direct to the scheme. A special mention for our top ten recorders in 2025 (based on number of records submitted by the end of December): Sue Taylor tops the list (for the third year in succession!), followed by Nigel Jones, Derek Whiteley, Ian Andrews, Paul Cook, Sabina George, Bill Deakins, David Lester, Frank Mullins, and Brian Walker.

### Some recording targets for 2026

- Please do join in with [Bee-fly Watch](#) wherever you are, and if you are within reach of the Hampshire/Wiltshire border just north of Andover, there is a complete 10 km square for which we have never had a record of Dark-edged Bee-fly! This is square [SU35](#) – surely there must be bee-flies there somewhere?!
- Don't forget to look out for two other spring species that are less widespread: [Silver Colonel soldierfly](#) (associated with wet meadows, mainly in the south of England but spreading further north), and [Spring Heath Robberfly](#) (widespread but very local on coastal dunes and inland sandy heaths).
- We are fortunate that many of the soldierflies and allies can be identified in the field or from photos, but there are some trickier ones that require microscopic examination. Inevitably these include some species that are very under-recorded and for which we don't have a full picture of their distribution and trend. If you are willing to collect a few specimens and send them in this would be a valuable contribution to the scheme. The targets here include the stiletto-flies in genus *Thereva* (especially from coastal and river shingle habitats, or from Scotland where a number of apparently rare species are found); the rarer horseflies; and for soldierflies the species pair *Sargus cuprarius/iridatus* (especially if the wings seem to have a dark patch across the centre – this might indicate *cuprarius* which now seems to be very rare, but requires dissection to confirm).
- And look out for more of the newly-arrived Buff-tailed Villa – see page 2 of this newsletter!

## Soldierflies and allies from the DF summer field meeting

In 2025 Dipterists Forum held its [summer field meeting](#) in Scotland, based at Glen Affric (near Loch Ness). Among the many species recorded during this meeting were at least 23 species of soldierflies and allies. Highlights included:

- The most northerly record ever for Black-legged Water-snipefly (*Ibisia marginata*).
- Numerous Flea Bee-fly (*Phthiria pulicaria*) on coastal sand dunes near Inverness.
- Round-spotted Major (*Oxycera dives*): the first record for East Ross vice-county, the most northerly ever recorded, and one of rather few recent records from anywhere.

In 2026 the DF summer field meeting will be in Somerset, with some great soldierfly habitat on the agenda. See the [DF website](#) for details, and do join us if you can.

Clockwise from top-left:  
*Black-legged Water-snipefly*; river shingle at Urquhart Bay Wood, habitat for the water-snipe-fly; Flea Bee-fly from the dunes at Culbin Sands (photos by Martin Harvey); Round-spotted Major from Belmaduthy Dam on the Black Isle (photo Steve Crellin)



**STOP PRESS:** A new paper provides a key to robberflies in genus *Neoitamus*, based on male genitalia (the only reliable way of separating the species found in Europe). As far as we know there are only two species in the UK: *N. cyanurus* (which is widespread) and *N. cothurnatus* (not confirmed in the UK since 1997, although there are recent records on the Channel Islands). This key will help confirm any future records of *cothurnatus* and allow us to check for additional species (*N. socius* occurs on the near continent).

- Varga, N., and Keresztes, G. 2026. A reviewed key for males of *Neoitamus* Osten-Sacken, 1878 (Diptera: Asilidae: Asilinae) with black femora and yellow tibiae from Europe (excluding Russia and Ukraine), with description of a new species and faunistic summary regarding Hungary. *Animal Taxonomy and Ecology*, 1777.2025.00130. <https://doi.org/10.1556/1777.2025.00130>