

Review – a new field guide for soldierflies and allies

- Zeegers, T., and Schulten, A. 2022. Field guide to flies with three pulvilli – Families of Homeodactyla of Northwest Europe. Stichting Jeugdbondsuitgeverij, 's Graveland. ISBN: 9789051070682. Translation: van Wouwen, N. 256 pages.

Review by Martin Harvey

What are flies with three pulvilli? “Pulvilli” are the pad-like structures that can be seen under the claws of many flies, at the end of the tarsi. Most flies have two pulvilli, but a set of related families within the soldierflies and allies are distinctive in having three pulvilli, and in recent taxonomy have been given the name Homeodactyla. So this book is a splendid new field guide to most, but not all, of the soldierflies and allies. See the table below for a more detailed list of which groups are included.

The field guide consists largely of keys and species accounts, both very well-illustrated, the former with clear graphics to show the distinguishing features at each step of the key, and the latter with high-quality photos of the species, usually showing both males and females.

The UK recording scheme for soldierflies and allies covers 11 families, of which seven are included in this field guide, the exceptions being Asilidae (robberflies), Bombyliidae (bee-flies), Scenopinidae (window-flies) and Therevidae (stiletto-flies). The book also has one species in a family that is not found in the UK, the Coenomyiidae (Odour-flies). Within the seven UK families covered, all the currently listed UK species are included in the book, with the exception of one horsefly:

Family	Coverage in book	UK species
Acroceridae - Hunchback-flies	7 species	all 4 are included
Athericidae - Water-snipeflies	3 species	all 3 are included
Coenomyiidae - Odour-flies	1 species	not in UK
Rhagionidae - Snipeflies	25 species	all 15 are included
Stratiomyidae - Soldierflies	62 species	all 49 are included
Tabanidae - Horseflies	57 species	29 of the 30 currently recognised UK species are included; the species we call “ <i>Hybomitra ciureai</i> ” in the UK checklist is treated in the book as a synonym of <i>H. solstitialis</i> (Meigen 1820) nec Lyneborg (1959); the species we call “ <i>Hybomitra solstitialis</i> ” in the UK checklist is not recognised in the book, and is treated as a variety of <i>H. bimaculata</i> .
Xylomyidae - Wood-soldierflies	3 species	all 3 are included
Xylophagidae - Awl-flies	4 species	all 3 are included

There is a long history of confusion over the naming of species in the ‘*bimaculata* group’ within genus *Hybomitra*. Theo Zeegers regards the UK concept of *Hybomitra solstitialis* (Scarce Forest Horsefly) as a variety of *Hybomitra bimaculata*, and also proposes that the UK concept of *Hybomitra ciureai* (Levels Yellow-horned Horsefly) should be synonymised with *H. solstitialis* (Meigen 1820) nec Lyneborg (1959) (Zeegers, Th. 2018. A new synonymy in the horsefly genus *Hybomitra* (Diptera: Tabanidae). [Nederlandse Faunistische Mededelingen 50: 89–92](#)). However, these proposals do not align with the experience of dipterists who are familiar with the species in the UK, and further work including DNA analysis is likely to be needed to fully resolve this issue. Anyone using the new field guide to key out these two *Hybomitra* species should be aware of the possibility that UK specimens may not fully match the key, and that voucher specimens should be retained where possible.

That complication aside, the new field guide is a very welcome addition to the resources available for soldierflies and allies in the UK. The keys are very clearly laid out, and in a number of cases pick up on useful identification features that are not mentioned in other UK sources, using characters that can be seen in the field or in close-up photos as far as possible, while not underestimating the challenges posed by the trickier species. The inclusion of about 37 non-UK species needs to be born in mind when using the keys, but the text makes it clear which are known from the UK. And there is always the exciting possibility that the field guide could lead to the discovery of further species that are present but overlooked in the UK.

At the time of writing, the book is on sale in the UK at £14.99, which is exceptionally good value for such a high quality publication. The publishers are Jeugdbondsuitgeverij, who describe themselves as a group of young nature enthusiasts, mostly entomologists, who work on the publications as volunteers. Thanks to the generosity of publishers, authors and photographers in donating expertise and images for the book the price has been kept low, in the hope of encouraging as many people as possible to take an interest in these flies. From my perspective as UK recording scheme organiser this is a highly commendable approach!

I would thoroughly recommend this book to anyone who has an interest in soldierflies and allies. It works well as a stand-alone field guide for UK use, and complements the well-known Stubbs and Drake British Soldierflies book really well. Thanks to Theo Zeegers & André Schulten, and translator Nick van Wouwen, for making it so accessible to English speakers.

