

Book reviews

Cheerful dancers

Chvála, M. 2005: The Empidoidea (Diptera) of Fennoscandia and Denmark. IV. Genus *Hilara*. Fauna Entomologica Scandinavica, Vol. 40. Brill Academic Publishers, Leiden-Boston. ISBN 9004147993, 233 pp. Price 99 EUR.

This is the fourth volume of the Empidoidea monographs by Milan Chvála, published in "Fauna Entomologica Scandinavica" (FES) decennially, as it now appears. The Tachydromiinae part (FES Vol 3) started the series in 1975, followed by the second one (Vol 12) including the families Hybotidae, Atelestidae and Microphoridae in 1983, and the third, addressing the genus *Empis* (Vol 29), in 1994.

The new volume deals with the large and difficult genus *Hilara* Meigen, with 90 species found in Denmark and Fennoscandia or in nearby areas. After the publishing of this new volume, the series is now more than a one-thousand-page achievement on the north European Empidoidea, hopefully to be completed in the future for the still missing taxa.

The structure and format of the book is clear and fixed according to the current style of the FES. The "Introduction" is enlightening, giving the reader a general idea of the taxonomic group, the history and challenges of its study, main collections of the important type material and so on, as well as giving an idea of what follows in the book.

The "Material and methods" section, always of great importance, gives the significant details of the preparation of the specimens and also, emphasizes the great importance of the museum collections for this kind of study. The "adult morphology" of the *Hilara* flies is comprehensively treated, the structure of the Empidoidea in general having been treated in detail by the author already in earlier volumes of the family in this series. The "Classification" section puts the genus in its systematic position, well founded by supporting

morphological characters. In more detail, the higher level phylogeny of empidooids was already treated in the second part of the series.

The "Life history" of empidooids and *Hilara* included, is fascinating to read, especially the epigamic behaviour. In *Hilara*, we can see the epigamic behaviour in its perfection, the male offering his mating partner a gift, usually an insect prey to eat but in some species a seed or the like, neatly wrapped in a silken web produced by the glands in the male front basitarsomere. Certainly, a reader would be pleased to read more about this and about swarming behaviour in general, but of course, this is a taxonomic book and we have to proceed onto the "Key to the Fennoscandian *Hilara* species" and to the treatment of species.

The key is impressive, consisting of 151 couplets, leading to 90 species, 17 of which have not so far been recorded in Denmark or Fennoscandia, but which occur in nearby areas. The couplets themselves are long, a good sign as many characters are treated in them, thus avoiding the drawback of so many identification keys that rely on one or two characters only. A non-specialist might miss a characterization of the genus *Hilara* itself in relation to the allied genera, but no worries: he or she can find a key to the subfamilies of Empidoidea as well as to the genera of Empininae in the *Empis* volume of FES and, the "Adult morphology" chapter deals of course with the important structures of *Hilara* itself.

The "List of groups and species" gives the species treated in the volume, divided according to the author's new classification into 12 species groups. When needed, the species groups have been further divided into species complexes. No subgeneric division has been made, the preference to maintain just the species groups in the genus is well founded by the author in the "Introduction". However, the species groups and complexes have been carefully defined giving distinct character sets.

The core of the volume is in the treatment of individual species. The descriptions are consis-

tent and immaculate and provided with illustrations of important structural details. The line drawings are sharp and easy to look at, but even a non-specialist can see that this group of insects is really a challenging one to study, in which the closely related species really are very similar to each other. The only thing that I felt was lacking was the habitus drawings of the groups, like the drawings of the different subgenera in the *Empis* volume.

But again, unlike the latter, the species groups of *Hilara* are uniform regarding their appearance, and, of course, you can find a nice habitus illustration on the front cover. The descriptions are accompanied by a discussion where the important diagnostic characters between similar species are compared. The distribution and biology are also discussed in connection with every species. If you cannot identify your *Hilara* with this book I'm afraid there is no cure.

The distribution of the species is discussed in connection with every species, but there is also a special chapter on zoogeography, where the North European species are divided into distributional groups, and later, at the end of the book, we can find the "Catalog", where all species are once again listed. For the readers of FES familiar black dots show the occurrence of species in the different natural history areas of Denmark and the Fennoscandian countries. In addition, the occurrence in Great Britain and the Netherlands, both comparatively well-known regarding their *Hilara* fauna, is included in the table. Of course, this kind distribution table is never completely up to date but reflects just the material that has been available in different collections, including the author's own. There remains a challenge for dipterists to try to fill the empty squares in tables.

Throughout the book, the reader gets the impression that the author really masters his field. There is lot of unpublished information and personal notes on the structure, occurrence and behaviour of the species etc., and it is obvious that the author's knowledge is much wider than just the northern European *Hilara*.

So often the taxonomy of just the most difficult groups of flies is to be found scattered in various publications and it is excellent that these kinds of concise publications on difficult groups of flies are being published, promoting and en-

abling new studies in various fields of their biology.

Milan Chvála has again made one of those books of which you will say: "How could we ever have managed without it before?"

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An excellent book on *Syritta* species of the World

Lyneborg, Leif & Barkemeyer, Werner 2005: The Genus *Syritta*, A World Revision of the Genus *Syritta* Le Peletier & Serville, 1828 (Diptera: Syrphidae). Entomograph Volume 15, A series facing global biodiversity in insects. Apollo books, Kirkeby Sand 19, DK-5771 Stenstrup, Denmark. ISBN 87-88757-53-6, Hardback, 224 pp. Price 420.00 DKK.

The book presents taxonomic World revision of the genus *Syritta* Le Peletier & Serville, 1828 (family Syrphidae, hoverflies). Hoverflies is one of the best studied families of Diptera in the World. Especially Palaearctic and Nearctic faunas of Syrphidae are rather well known. In this book, 17 new species in the genus *Syritta* from the poorly known Afrotropical region are described. Therefore, this is the beginning to a better knowledge of the Afrotropical syrphid fauna. In many genera, a revision is needed between Palaearctic, Nearctic and Afrotropical regions. In this book the needed revision is made for the genus *Syritta*.

The book covers all of the 60 known species of *Syritta*, including the 32 new species described. These 60 species are arranged in 16 species-groups. There are extensive chapters of the general morphology of the genus *Syritta* with the following partly illustrated parts: The head, The thorax, The wings, The fore and mid legs, The hind leg, The abdomen, The male genitalia and The female genitalia. In these parts, the general morphology is described and the differences between the species-groups are treated. The female genitalia is more shortly dealt with, because the female ovipositor has no clear external characters between species and the internal genital organs

have not been investigated. The general morphology is followed by short Distributional notes and Check-list of the *Syritta* species with synonymies and distributional records.

The main part of the book consists of the key to species and of descriptions of the *Syritta* species. The key to species is divided into two parts, males and females, that makes the key long but also easier to follow. In the key, clear differences for separating different type of *Syritta* species have mainly been used. The use of distributional regions as a separator seems to work out in the key. This might also be a problem at least generally, because some of the descriptions of the new species are based on only a few specimens and the distributional regions are not reliably known. The color drawings of vertical triangles of males, female frons and hind femora are very illustrative. The references to the drawings are mainly clear, but there are some mistakes at least on the page 45.

The authors have made excellent work in the

descriptions of the species. All the old species are redescribed in order to achieve uniform descriptions. This makes comparisons between species easier and also more reliable. The descriptions of males are accurate and the drawings of male genitalia are adequate for determination. The descriptions of females are short and show only the differences of females from males, as is the usual practice. This makes it sometimes hard to determine the females. The examined material is documented excellently making further research easy. Distribution and habitat is shortly described for each species.

The price of the book is moderate. The book is excellent for professional dipterologists. It also gives an outstanding base for the further research of the genus *Syritta*. Let's hope that the book inspires to compile corresponding world wide revisions from other genera of Syrphidae!

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