

BOOK REVIEW

GRIFFITHS G.C.D.: Anthomyiidae. In Griffiths G.C.D. (ed.): FLIES OF THE NEARCTIC REGION. Vol. VIII, Part 2, No. 15. pp. 2485–2635. E. Schweizerbart'sche Verlagsbuchhandlung, Stuttgart, 2004, 151 pp., 178 Figs. ISBN 3-510-70027-9. Price EUR 88.00.

The ambitious idea behind this extensive series of monographs on the families of Nearctic Diptera, and use of Lindner's famous *Die Fliegen der palaearktischen Region* as a model, was briefly commented on in my previous review in this journal (Rozkošný R., 1997: *Eur. J. Entomol.* 94: 73). In the present issue (No. 15) the revision of the Nearctic Anthomyiidae is enriched by a further 151 pages and 178 illustrations. The two genera included in this issue, *Strobilomyia* Michelsen and *Chirosia* Rondani, are handled in the same way as the genera in all preceeding issues. Expert notes on the recent taxonomy of both genera are followed by a discussion of the basic characters and features common to all their species, and biological remarks and notes on the present level of knowledge. Relationships among the species are discussed using cladistic argumentation. Detailed descriptions of species are accompanied by a full synonymy, including additional references, a critical evaluation of earlier data, diagnosis, host plants, immature stages, life history (where known) and comments on distribution. Illustrations of the diagnostic characters are of a high standard and mainly of the terminalia of both sexes, and distribution maps are subjoined for each species.

The generic concept of *Strobilomyia* is the same as that in the worldwide revision of this genus published by Verner Michelsen in 1988. *Strobilomyia* embraces a unique group of species, the larvae of which feed on the developing ovules in cones of spruce, fir and larch. Insect pests of cones are a serious problem in many seed orchards and recent research on the specialized larvae of this genus stimulated the publication of a set of special papers devoted to the biology and control of the anthomyiids of economic importance. Thus, systematic studies and especially a delimitation of individual species within *Strobilomyia* have important practical consequences. Griffiths presents exhaustive descriptions or re-descriptions of 12 species, 4 of them (*S. abieticola* sp.n., *S. columbiana* sp.n., *S. flexiliventris* sp.n. and *S. intermontana* sp.n.) are new. Only two species are from the Holarctic and occur in Europe: *S. carbonaria* (Ring-

dahl) and *S. multisetosa* (Ringdahl), the first attacking cones of fir in Central Europe and the second known from Swedish and Finnish Lapland. *S. multisetosa* is transferred by Griffiths from the genus *Lasiomma*. In Europe six additional, widespread but exclusively Palaearctic species of *Strobilomyia* are known.

In comparison with earlier papers, *Chirosia* sensu Griffiths is better characterized, both morphologically and biologically. He excludes a group of species originally included in *Acrostilpna* s.str. (*C. latipennis* in recent European literature). *Chirosia* thus only includes species with larvae feeding on fern as borers, leaf rollers, leaf miners or gall formers. Moreover, this concept is supported by three additional autapomorphies: (1) the 6th tergite fused with the pregenital sclerite, (2) strong setae on tergites 3–5 in both sexes and (3) each of sternites 6 and 7 in female developed as a pair of elongate sclerites. Griffiths' review embraces 18 species, 4 of them described as new (*C. holoptica* sp.n., *C. platyptera* sp.n., *C. pseudocinerosa* sp.n. and *C. shannoni* sp.n.), two transferred from *Pycnoglossa* and one from *Delia*, as new combinations. Four species have a Holarctic distribution and are well known in Europe: *C. betuleti* (Ringdahl), *C. flavipennis* (Fallén), *C. montana* Pokorný and *C. similata* (Tiensuu). Nevertheless, the Palaearctic fauna includes at least 10 additional species.

Thus the 15th part on Nearctic Anthomyiidae leaves only a few final issues to complete the study as of the larger genera there is only *Botanophila* to come. I have only one critical comment to make about this professionally written and perfectly arranged monograph. A reader may have difficulties finding some of the citations in the Reference List, which is illogically divided into three parts scattered in different issues (numbers) of this monograph plus two Special Reference Lists (for *Delia platura* and *Strobilomyia*). A citation may therefore be hidden in one of five reference lists, the number of which could increase.

All issues on the Anthomyiidae so far published confirm that Graham C.D. Griffiths is not only a reputable dipterist with enormous research and publishing experience but a prominent organiser and editor of the *Flies of the Nearctic Region*. His outstanding organising ability is well known to the majority of dipterists in the world community from the time when he was active as the chairman of the *Council for International Congresses of Dipterology* from 1986 to 1994.

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