GRIFFITHS, G. C. D. (Editor). Flies of the Nearctic Region E. Sweitzerbart'sche Verlagsbuchhandlung (Nägele u. Obermiller) Stuttgart, 1982.

The inaugural issues of this series were previously reviewed in *Quaestiones Entomologicae* (Ball, 1980, 16 (3-4): 676-678). Since then, two more numbers have come to my attention, and are briefly reviewed below.

Volume V, Homeodactyla and Asilomorpha, Part 13, Number 3. Bombyliidae, by J. C. HALL and N. L. EVENHUIS, pp. 185-280. ($36.96, U.S.).

This number begins part way through the description of one species, and ends part way through the description of another. Genera whose species are treated are: *Triploechus* Edwards (in part); *Lordotus* Loew; *Geminaria* Coquillett; *Sparnopolius* Loew; *Aldrichia* Coquillett; and *Conophorus* Meigen (in part). This is a standard, well illustrated treatment of the species of the groups listed above, and, as noted in my review of the previous part (*Quaest. Ent.* 16: 677) this part is also "uninspiring, of interest mainly to specialists and those who want to name their collections of bee flies". I draw attention to the well executed illustrations of habitus of selected bombyliids representing the genera *Lordotus*, *Geminaria*, *Sparnopolius*, and *Aldrichia*.

I find it unfortunate that an issue should begin and end part way through species accounts. This is no doubt some kind of economy measure, though one could imagine more sinister motives for such a practice.

Volume VIII. Cyclorrhapha II (Schizophora: Calyptratae). Part 2, Number 1. Anthomyiidae, by G. C. D. GRIFFITHS, pp. 1-160. ($56.32 U.S.).

This number contains a brief general introduction to the Anthomyiidae, a more detailed introduction to the genus *Pegomya* Robineau-Desvoidy, and a thorough taxonomic treatment of most of the species of subgenus *Pegomya*. Although it would seem appropriate to begin treatment of a family with a rather detailed general synopsis, Dr. Griffiths was forestalled in doing so by a generic revision of anthomyiids that will probably be published soon by Dr. V. Michelsen. Nonetheless, potential purchasers might have been offered a little more information than a statement about the unreliability of Huckett's work, and a paragraph about plesiomorphous and apomorphous character states of adult anthomyiids.

The seemingly endless debate among taxonomists about the species problem has been supplanted among dipterists by a seemingly endless debate about homologies of the male genitalia and associated sclerites. Dr. Griffiths devotes about three pages of text to attempt once more to convince his opponents about the correctness of his views. Some of the homologies that he previously proposed have been proven incorrect, but his basic point seems well taken that the genitalia of male cyclorrhaphans have rotated through 360° in the course of ontogeny and phylogeny, and this must be taken into account in comparing structures between such flies and those whose genitalia have rotated less. His assertion is probably correct that the principal cause of opposition by various dipterists is unwillingness to change former interpretations because of the consequentially required changes to an established system of naming these sclerites. He ends this discussion with suggestions for further work to improve understanding of homologies of the genitalic sclerites and those of the postabdomen.

Treatment of the taxa of anthomyiids is phylogenetic. Dr. Griffiths establishes the monophyly of the genus *Pegomya*, and discusses its relationships based on features of adults and larvae. A discursive characterization of the genus is followed by a detailed consideration of the two subgenera *Pegomya* (*sensu stricto*) and *Phoraea* Robineau-Desvoidy, as well as of their sections, subsections, superspecies, and some isolated species not assigned to superspecies. Details of distribution of character states among these taxa are provided in two figures, one for

each subgenus. Unfortunately, the characters are arranged in morphological sequence according to organ system rather than in a sequence by which the reconstructed phylogeny could be visualized. The author also neglects to offer reasons for his classification of character states as plesiomorphous or apomorphous.

In the following text, species of *Pegomya* are arranged hierarchically, with the supraspecific taxa in the same sequence as appears in Fig. 5. (*loc. cit.*, p. 14). The discussion of each supraspecific taxon includes discussion of character states from a phylogenetic point of view, as well as information about host plants of included species.

Treatment of species and subspecies contains the usual taxonomic information. Descriptions of structural features are extensive. Data about host plants and life history are provided for most species. Phylogenetic relationships or chorological affinities receive scant notice.

Geographic ranges are described in terms of states and provinces, with only one map (*loc. cit.*, Fig. 154, p. 126) being used to show the ranges of several species in relation to southern deserts and western salt marshes.

Good line drawings of post abdominal and genitalic sclerites, prepared by the author's wife, Deirdre, admirably supplement the descriptions.

Anthomyiid species are difficult to identify, and probably to classify. It seems that many species are Holarctic, and this adds another dimension to the difficulties of working with the Nearctic members, for one must take into account the Palaearctic fauna. Dr. Griffiths seems to have done excellent, careful work, and he has presented it by means of his characteristic style of clear expository writing. His many references to host plants and way of life show that he thinks about these organisms as living entities, and this adds appreciable interest to the text. Specialists on anthomyiids will no doubt find this issue an excellent one.

It is unlikely, however, that even dipterists interested primarily in other families will find much in this issue to attract their attention. The lack of a general discussion of the family, absence of a key to the species of *Pegomya*, lack of habitus illustrations, virtual lack of distribution maps, and neglect to justify decisions for classification of character states as plesiomorphous or apomorphous rob this issue of more general appeal. This issue even lacks the virtue of being a complete treatment of a single subgenus. The complaint about incomplete individual issues has already been leveled above.

Because of these perceived shortcomings and because of relatively high costs for individual issues in this series, the Editor and publishers of Flies of the Nearctic Region might be well advised to reconsider their publication strategy, if they expect to do well in marketing their important and otherwise excellent product.

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