- SIMON J., WEIDENFELD D., BRUCE P. & PUIG C. 1995: Resampling Stats. Resampling Stats Inc., Arlington, Virginia.
- SOKAL R.R. & ROHLF F.J. 1995: Biometry. 3rd ed. Freeman, San Francisco, 885 pp.
- SOLBRECK C. 1991: Unusual weather and insect population dynamics: Lygaeus equestris during an extinction and recovery period. *Oikos* 60: 343–350.
- Walstad J.D., Radosevich S.R. & Sandberg D.V. (eds) 1990: Natural and Prescribed Fires in Pacific Northwest Forests. Oregon State Univ. Press, Corvallis.
- WASHBURN J.O. & CORNELL H.V. 1981: Parasitoids, patches and phenology: their possible role in the local extinction of a cynipid gall wasp population. *Ecology* **62**: 1597–1607.
- Wool D. 1984: Gall-forming aphids. In Ananthakrishnan T.N. (ed.): *Biology of Gall Insects*. Oxford & IBH, New Delhi, India, pp. 11–58.
- Wool D. 1990: Regular alternation of high and low population size of gall-forming aphids: analysis of ten years of data. *Oikos* 57: 73–79.
- Wool D. 1996: Aphid-induced galls on Pistacia in the natural Mediterranean forest of Israel: which, where, and how many? *Isr. J. Zool.* 41: 591–600.
- Wool D. & Bar-El N. 1995: Population ecology of the galling aphid Forda formicaria von Heyden in Israel: abundance, demography and gall structure. *Isr. J. Zool.* 41: 175–192.
- Wool D. & Burstein M. 1991: A galling aphid with extra life-cycle complexity: population ecology and evolutionary considerations. *Res. Popul. Ecol.* 33: 307–322.
- Wool. D. & Burstein M. 1992: Preference, tree resistance or chance: how to interpret differences in gall density among trees? In Menken S.B.J., Visser J.H. & Harrewijn P. (eds): 8th International Symposium on Insect-Plant Relationships. Kluwer, Dordrecht, pp. 33–35.
- WOOL D. & KOACH J. 1976: Morphological variation of the gall-forming aphid Geoica utricularia (Homoptera) in relation to environmental variation. In Karlin S. & Nevo E. (eds): *Population Genetics and Ecology*. Academic Press, New York, pp. 239–272.
- WOOL D. & MANHEIM O. 1986: Population ecology of the gall-forming aphid, Aploneura lentisci in Israel. *Res. Popul. Ecol.* 28: 151–162.
- WOOL D. & MANHEIM O. 1988: The effects of host plant properties on gall density, gall weight and clone size in the aphid, Aploneura lentisci (Pass.) (Aphididae, Fordinae) in Israel. *Res. Popul. Ecol.* 30: 227–234.
- WOOL D., MANHEIM O., BURSTEIN M. & LEVI T. 1994: Dynamics of re-migration of sexuparae to their primary hosts in the gall-forming Fordinae (Aphidoidea: Pemphigidae). *Eur. J. Entomol.* 91: 103–108.
- WOOL D., MANHEIM O. & INBAR M. 1997: Return flight of galling aphids to their primary host trees: implications for differential herbivory and gall (Aphidoidea: Pemphigidae: Fordinae) abundance. Ann. Entomol. Soc. Am. 90: 341–350.

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BOOK REVIEW

PFEFFER A.: ZENTRAL- UND WESTPALÄARK-TISCHE BORKEN- UND KERNKÄFER (COLE-OPTERA: SCOLYTIDAE, PLATYPODIDAE). Pro Entomologia, c/o Naturhistorisches Museum, Basel, 1995, 310 pp., ISBN 3-9520840-6-9. Hardbound. Price CHF 45.00.

My book reviews are usually long overdue, and this one is no exception. When I received the book

in late 1995, I had no idea that the review would be at the same time an obituary. Antonín Pfeffer, our long-time collaborator and former member of the Editorial Board, died 19 February 1997, at the age of 93. This book, summarizing the results of his lifetime devotion to bark beetles, is therefore an appropriate corollary of his scientific career.

The book, first published as a journal article [Entomol. Basil. 17, 1994 (published 1995):

5-310], treats the bark beetles (Scolytidae) and ambrosia beetles (Platypodidae) of the Palaearctic region, with the exception of the Canary Islands and the Far East, and is composed of several parts. A short cursorial general introductory section (sometimes perhaps too superficial and fragmentary) deals with aspects of biology (such as trophical relations to plants and fungi, behavioural aspects, reproduction and brood care, gallery systems, succession and interspecific relations) and types of geographical distribution. The following, main part of the book is a systematic treatment containing short characteristics of supraspecific taxa, keys for identification of adults down to species or subspecies, synonymies, and biological and distributional notes. One new subspecies is described, and one new species name is established replacing a junior homonym. The next part is a list of host plants with associated bark beetle species. A list of literature, somewhat arbitrarily divided into Monographs and Catalogues, Bibliographies, and a third subdivision entitled "Einzelne wichtige Beiträge", is followed by a taxonomic index. The book ends with a block of 48 pages of illustrations of bark beetle morphology (line drawings and scanning micrographs prepared by M. Knížek) and gallery systems (photographs by V. Zumr).

Bark and ambrosia beetles are of considerable practical importance and are for traditional and practical reasons frequently treated as separate families by specialists, although beetle taxonomists currently tend to include them as subfamilies within the family Curculionidae (even in its narrow sense). These tendencies are not mentioned, and a few surprising points can be found in the classification used (for a review by a specialist see Beaver, Entomol. Mon. Mag. 132, 1996: 303-304). The most prominent surprise undoubtedly is the reviving of the Scolytoplatypodidae (containing a single genus Scolytoplatypus Blandford) as a separate curculionoid family, without the slightest explanation other than bringing up the differences from Scolytidae and Platypodidae in the family key on p. 31. Scolytoplatypus is always included in Scolytidae in recent beetle compendia, and such an unexpected action (the more so because the genus does not occur in the region treated in the book) would certainly require careful argumentation.

A few further nomenclatoric notes follow which may be useful to the reader. Pfeffer divides the family Scolytidae Latreille, 1807 into the

subfamilies Hylesininae Erichson, 1836, Ipinae Reitter, 1894 and Scolytinae Latreille, 1807 (I note that the subfamily Scolytinae cannot be included "as a tribe within the Ipinae" as Beaver suggests, since the family Scolytidae would be thus left without its nominate subfamily Scolytinae which is of course against the nomenclatoric rules). Lawrence & Newton (in Biology, Phylogeny, and Classification of Coleoptera Vol. 2, Polish Acad. Sci., Warszawa, 1995, p. 913), who obviously undertook painful re-examination of higher category beetle names including their authors and validity, list Latreille, 1804 (a publication not cited by Pfeffer) as the correct year for the family-group names based on Scolytus Geoffroy. The same authors consider the status of the name Ipinae uncertain, and list Bedel, 1888 as the first correct use of a family-group name based on Ips DeGeer. On pp. 207-208, the author ascribes the family Platypodidae to Latreille, 1802, the nominate subfamily Platypodinae to Strohmeyer, 1911, and the nominate tribus Platypodini to Schedl, 1938. This is incorrect (familygroup names based on the same genus bear the same author and date): moreover. Lawrence & Newton list Shuckard, 1840 as the author.

Some statements from the general introductory chapters appear oversimplified or even incorrect. The subsection entitled "Intraspezifische Beziehungen", for example, begins with: "Innerhalb der Ordnung Coleoptera ist Brutpflege durch Männchen und Weibchen nur bei den Borkenkäfern anzutreffen." Such care for offspring does exist in other beetles (e.g., in Nicrophorinae or Passalidae).

Regardless of the author's few imprecisions, "idiosyncrasies" (Beaver), and occasional formal inconsistencies (which could have been eliminated by more careful proofreading), the book certainly makes a major contribution to the knowledge of bark and ambrosia beetles. Unlike the previous two author's comprehensive works (concerning only Central Europe) which were published in Czech, this one, being in German, is much more widely accessible. It will be indispensable (particularly as an identification tool) to both coleopterists and forest entomologists. We were lucky that it was finished just in time, and the author deserves an "in memoriam" acknowledgement for his devoted efforts as an excellent specialist.

P. Švácha