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BOOK REVIEW

Byrd J.H. & Tomberlin J.K. (eds) 2020: FORENSIC ENTOMOLOGY: THE UTILITY OF ARTHROPODS IN LEGAL INVESTIGATIONS. 3RD ED. CRC Press, Boca Raton, FL, xxxiv + 585 pp. ISBN 978-0-815-35016-3 (hardback), 978-0-815-35020-0 (paperback), 978-1351163767 (ebook). Price USD 120.00 (hardback), USD 74.99 (paperback), USD 67.49 (e-book).

Since the first edition of this book in 2000, edited by Jason H. Byrd and James L. Castner, it has become the reference text for many forensic entomologists inside and outside the United States of America. Later publications written by different experts have complemented the first edition (Amendt et al., 2010; Gennard, 2012; Gunn, 2009; Rivers & Dahlem, 2014) but it is still the standard reference book in the libraries of pathologists, researchers and students. A joke about forensic entomology in congress in which M.A. Perotti pointed out that the phoretic mite visible on the *Nicrophorus* burying beetle depicted on the cover of the first edition was the only mite in the whole book, led to the addition of a chapter on previously forgotten mites in the second edition (Perotti & Braig, 2009) and the updating of this chapter in this, the third edition (Ch. 22). Twenty nine chapters and fifty one contributors from eight countries and four continents reflect the quality of this compilation that includes the basic concepts of forensic entomology together with the main advances that have occurred during the last decades in this multidisciplinary science.

J.K. Tomberlin replaced J.L. Castner as a coordinator of this new edition devoted to the memory of B. Greenberg (1922–2017). The prologue is written by Jerry A. Payne, who first studied insect succession on pig carcasses (Payne, 1965) and standardized the methodology for future studies on forensic entomology. Several chapters follow the same structure as in previous editions, including a review of the main insects of forensic importance (Ch. 2), methods of collection (Ch. 3), rearing of preimaginal stages under laboratory conditions (Ch. 4), estimating the age of the evidence (Ch. 10) and basics of an accurate estimation of the postmortem interval (Ch. 9). New contributions review the concept of null hypothesis and the assumptions associated with the use of arthropods in estimating postmortem intervals (Ch. 14), deal with the usefulness of arthropods in wildlife investigations (Ch. 23), the usefulness of volatile organic compounds (VOCs) in forensic research (Ch. 24), detailed account of the importance of the microbiome during the decomposition process (Ch. 25) and address the urban forensic problems associated with arthropods. Last chapters focus on the historical background of forensic entomology (Ch. 28) and provide practical recommendations for the training of future professionals (Ch. 29). One negative aspect of this new edition is the fact that the identification keys, both for adults and larvae, only cover the North American fauna, which means these chapters are of limited usefulness compared with the worldwide scope of this new edition with experts from different continents. Probably I would suggest the use of specific chapters for identification of adults and immatures in other books for European technicians and scientists (Szpila, 2010, 2012; Velásquez et al., 2010), together with other published specialized keys covering other regions of the world.

This book is published in both printed and electronic versions. The printed version is heavy and not easy to manipulate. Therefore, an e-book may be much easier to use and transport to the laboratory or the field. Nevertheless, the pleasure of reading a hard copy will be preferred by some.

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