

Book review

LES POUX (INSECTA, ANOPLURA) DE LA RÉGION AFROTROPICALE. By François-Xavier Pajot. Published by IRD Éditions-Diffusion (32 avenue Henri-Varagnat, F-93143, Bondy Cedex, France), 2000, 293 pp; 76 figs. ISSN 1286-4994. ISBN 2-7099-1456-5.

The sucking louse fauna of Africa is the richest known of any of the continents, with about 203, or approximately 37%, of the world's described species. This guide to the sucking lice of the Afrotropical (or Ethiopian) region is number 37 in a series entitled 'Collection Faune et Flore Tropicales' published by the Institut de Recherche pour le Développement (IRD) in Paris. It represents the first comprehensive guide to the sucking lice of this region and the first major treatment of Afrotropical lice since John Ledger's (1980) monograph on African Phthiraptera (volume IV in the series entitled, 'The arthropod parasites of vertebrates in Africa south of the Sahara', edited by Fritz Zumpt and published by the South African Institute of Medical Research, Johannesburg).

Professor Pajot has produced a masterful work that deserves to be read or consulted by all workers on lice and by mammalogists interested in the ectoparasites of their subjects. Useful information for public health workers and those interested in tropical and vector-borne diseases is also included. Despite the French-only title on the front jacket cover, an English synopsis of the book is included on the back cover and, more importantly for non-francophones wishing to identify Afrotropical sucking lice, all identification keys in the book are presented in English in their entirety after the same keys are presented in French. In fact, these keys represent the first identification guide to the species level for adult stages of all known Afrotropical sucking lice. In 1960, Phyllis Johnson produced a superb identification guide to the sucking lice of African rodents and insectivores (U.S. Department of Agriculture Technical Bulletin no. 1211) but Pajot's work also includes the sucking lice of other Afrotropical mammals such as primates, hyraxes, ungulates, carnivores, elephant shrews, lagomorphs and, of course, the aardvark. Immature stages are known for very few of these lice so it is currently impossible to construct keys for subadult stages.

The book is divided into the following sections (in French): Summary (Table of Contents), Acknowledgements, Introduction, Morphology, Pathogenic role (Medical and Veterinary Importance), followed (in French and English) by keys to families present in the Afrotropical region, and then by keys to subfamilies (if appropriate), genera and species (and subspecies in two cases) for each family. The text is completed by a host-parasite list, a bibliography, an 'index of anopluran species cited', an 'index of host species cited', and finally, by a

'table of illustrations' (a list of figures and their sources). Following the acknowledgements page, a line drawing of the African continent clearly delineates the limits of the Afrotropical region as treated in the book. The section on Medical and Veterinary Importance mainly covers the scourges caused by louse infestations of humans, including the pathogens they transmit, and how they can be controlled. Little information is provided on the importance of louse infestations of other mammals or the pathogens that these lice may transmit because, quite simply, little research has been completed on this subject (except for a few studies pertaining to livestock lice). Hopefully, this book will serve to stimulate more studies in this area.

The bulk of the book is devoted to the identification keys, and presumably this would be the main interest of most readers. Keys are amply accompanied by diagnostic figures, including some from the author's earlier descriptive works on the sucking louse fauna of Central and West Africa. Although there are 76 numbered figures in this book, several of the figures include more than one drawing and there is a total of 296 separate illustrations. I found the keys easy to use in almost all cases. Professor Pajot does not include information on the phylogenetics of African sucking lice in this book. I agree with this decision, largely because so little information on this topic is available, and the data that are available can be conflicting. Hopefully our knowledge of louse phylogenetics will increase in the future, with researchers in Australia, Britain, New Zealand and the U.S.A. all currently working on morphological and molecular aspects of louse phylogenetics.

I found very few typographical errors in this book. Curiously, the spelling of *somerini* (until now, it has always been listed as *somereni*) is used without explanation on page 86 and in the preceding keys for one species belonging to the genus *Hoplopleura*. Of course, this is a minor discrepancy and I wholeheartedly recommend this book to all interested parties. It will serve as the standard identification guide for Afrotropical sucking lice for years to come.

The publication of Professor Pajot's book underscores a renewed world-wide interest in louse systematics, biology, evolution and host relationships that has occurred in recent years. Studies involving lice as model organisms are being completed, for example, on alpha-level taxonomy, phylogenetics, host-parasite cospeciation (or the lack of it in some cases), the influence of host reactions (grooming and immune responses) on parasite biology and evolution, and vector-borne pathogens. Even the 'old' argument as to whether human head and body lice represent separate species, subspecies, or something else, is now being investigated at the molecular level.

LANCE A. DURDEN