A Guide to Medical Entomology

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A GUIDE TO MEDICAL ENTOMOLOGY

M W Service

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Contents

<i>Preface</i>	vii
<i>Acknowledgements</i>	x
1 Introduction to medical entomology	1
2 Introduction to the arthropods (insects, mites, ticks etc.)	5
3 Introduction to the order Diptera – mosquitoes, horseflies, houseflies, tsetse flies etc.	20
4 Introduction to the mosquitoes (Order Diptera: Family Culicidae): classification, morphology, life–cycle and control principles	22
5 <i>Anopheles</i> mosquitoes (Order Diptera: Family Culicidae, Subfamily Anophelinae)	44
6 Culicine mosquitoes (Order Diptera: Family Culicidae, Subfamily Culicinae)	53
7 Blackflies (Order Diptera: Family Simuliidae)	71
8 Phlebotomine sandflies (Order Diptera: Family Psychodidae)	78
9 Biting midges (Order Diptera: Family Ceratopogonidae)	83
10 Horseflies, deerflies and clegs (Order Diptera: Family Tabanidae)	88
11 Tsetse flies (Order Diptera: Family Glossinidae)	95
12 Houseflies, related flies and stableflies (Order Diptera: Family Muscidae)	102
13 Myiasis–producing flies, blowflies, bluebottles, greenbottles and fleshflies (Order Diptera: Families Calliphoridae and Sarcophagidae)	113
14 Myiasis and warble and botflies (Order Diptera: Families Cuterebridae, Oestridae and Gasterophilidae)	122
15 Fleas (Order Siphonaptera: Families Pulicidae, Leptopsyllidae and Ceratophyllidae)	127
16 Lice (Order Anoplura: Families Pediculidae and Phthiridae)	136
17 Bedbugs (Order Hemiptera: Family Cimicidae)	142
18 Triatomine bugs (Order Hemiptera: Family Reduviidae, Subfamily Triatominae)	145
19 Cockroaches (Order Dictyoptera)	150
20 Soft ticks (Order Metastigmata: Family Argasidae)	154
21 Hard ticks (Order Metastigmata: Family Ixodidae)	160
22 Scabies mites (Order Astigmata: Family Sarcoptidae)	167
23 Scrub typhus mites (Order Prostigmata: Family Trombiculidae)	171

24	Miscellaneous mites of minor medical importance (Order Prostigmata: Families Demodicidae and Pyemotidae: Order Astigmata: Families Acaridae and Pyroglyphidae: Order Mesostigmata: Family Dermanyssidae)	175
25	Miscellaneous poisonous, venomous and allergic arthropods	180
26	Methods for dissecting arthropod vectors to determine infection rates	184
27	Methods for collecting and preserving medically important arthropods	189
28	Insecticides and insecticide resistance	196
	<i>Bibliography</i>	204
	<i>Index</i>	211

Preface

This book is written for those whose work is concerned with medicine, hygiene, public health or parasitology but who have no specialised knowledge of medical entomology. Its aim is to provide basic information regarding the recognition of arthropod vectors of disease, their biology and life-cycles, their role in the transmission of diseases to man, and to present a guide to their control. It is hoped that the book will be used selectively to suit the varied needs and requirements of its readers. For example, it is unlikely that physicians being introduced to medical entomology will need to remember either the numbers

or durations of the various stages in the life-cycles of the many different vectors. This type of information is nevertheless included in the book so that it can serve as a reference source. Paediatricians, nurses and community health workers will probably find the chapters on lice, bedbugs, scabies mites, houseflies and blowflies etc. more relevant to their needs than those describing the role of tsetse flies and blackflies in the transmission of sleeping sickness and river blindness. On the other hand students specialising in human parasitology or medical entomology will require to learn more from the book than others, and in addition will probably

Fig 1 The main zoogeographical regions of the world.

need to refer to more specialised publications for greater detail on certain topics.

Attempts have been made to present clear and precise accounts of the vectors without unnecessary detail. For this reason little space has been given to detailed descriptions of arthropod mouthparts and only sufficient morphological details are given to identify the vectors.

Chapter 2 which outlines the classification and external and internal morphology of the arthropods is considerably shorter than found in most books on medical entomology for two reasons. Firstly, it is not considered essential that students interested in medical entomology need have detailed knowledge of this aspect of general entomology, and secondly it is realised that few students read such accounts!

The 'Recommended References' at the end of the book provide a starting point for those requiring more detailed information on various vectors or topics:

where possible recent review articles and generalised papers and books have been cited.

When describing the distribution of vectors it is often convenient to refer to one or more of the six zoogeographical regions of the world, which are shown in figure 1. Basically the Palearctic region is the whole of the Old World north of about the Tropic of Cancer, the Nearctic region is America north of Mexico, the Neotropical region comprises Mexico and the Americas to the south, and Africa south of the Sahara is the Afrotropical region, previously called the Ethiopian region. The Oriental region is less easily defined, but comprises all tropical lands in the east, such as the Indian subcontinent and Malaysia, but excluding New Guinea, Australia, and New Zealand, which are collectively known as the Australasian region.

The drawings which are so essential in a book of this sort have been provided by Mr S. N. McDermott who has had considerable experience in illustrating medically important arthropods.

To Wednesday

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M. W. Service