HUMANITY'S BURDEN

Humanity's Burden provides a panoramic overview of the history of malaria. It traces the long arc of malaria out of tropical Africa into Eurasia, its transfer to the Americas during the early years of the Columbian exchange, and its retraction from the middle latitudes into the tropics since the late nineteenth century. Adopting a broadly comparative approach to historical patterns and processes, it synthesizes research findings from the natural and social sciences and weaves these understandings into a narrative that reaches from the earliest evidence of malarial infections in tropical Africa up to the present. Written in a style that is easily accessible to nonspecialists, it considers the significance of genetic mutations, diet, lifestyle, migration, warfare, palliative and curative treatment, and efforts to interrupt transmission on the global distribution of malaria.

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There is no single method of attack against malaria. Spraying equipment has to be constantly maintained and repaired. World Health Organization, PRINT-EURO-MALARIA, Photo No. 17939. © World Health Organization. Used by permission.

Second row, left to right:

A young patient being checked for possible enlargement of the spleen caused by malaria. Over much of Africa, there is so much malaria that present methods of vector control are inadequate to check the disease. World Health Organization, PRINT-AFRO-MALARIA, Photo No. 4931. © World Health Organization. Used by permission.

Anopheles mosquito by James Gathany.

A routine malaria survey on the island of Grande Comore to obtain the seasonal malaria parasite rate among schoolchildren. Under the eye of the schoolmaster, the children line up to have a blood slide taken. World Health Organization, PRINT-AFRO-MALARIA, Photo No. 18064. © World Health Organization. Used by permission.

Bottom row, left to right:

DDT spray operations by an antimalaria team in a village of Madras. World Health Organization, PRINT-SEARO-MALARIA, Photo No. 8521. © World Health Organization. Used by permission.

Child showing scars that resulted after local healers tried to eliminate the congestion caused by malaria. World Health Organization, PRINT-AFRO-MALARIA, Photo No. 11888. © World Health Organization. Used by permission.

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Humanity's Burden

A Global History of Malaria

JAMES L.A. WEBB Jr.

Colby College



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> For James and Jeanne and Margaret and Eugene

"If we take as our standard of importance the greatest harm to the greatest number, then there is no question that malaria is the most important of all infectious diseases."

Sir Frank Macfarlane Burnet, *Natural History of Infectious Disease*, 3rd ed. (Cambridge: Cambridge University Press, 1962), 341.

"Just as the history of malarial disease shows it to have been a malady of all times, so the inquiry into its geography leads us to recognize in it a disease of all *races* and *nationalities*."

August Hirsch, *Handbook of Geographical and Historical Pathology*, vol. I (London: New Sydenham Society, 1883), 243.

"I do not know another disease that so mimics other disorders or that kills so rapidly that we can see the patient literally slipping away under our eyes. No matter how much experience we have had or how widely we read about the disease we cannot be certain that we have mastered its recognition."

Michael Gelfand, *Rivers of Death in Africa* (London: Oxford University Press, 1964), 3.

"The first axiom of malariology, that lessons learnt in one part of the world may not be applied to other parts of the world, without local verification, is as true as ever; it is unfortunately as often neglected as ever."

D. Bagster Wilson, "Malaria in the African," *Central African Journal* of *Medicine* vol. 4, no. 2 (1958), 73.

"Everything about malaria is so moulded and altered by local conditions that it becomes a thousand different diseases and epidemiological puzzles. Like chess, it is played with a few pieces, but is capable of an infinite variety of situations."

Lewis Hackett, *Malaria in Europe* (London: Oxford University Press, 1937), 266.

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James L. A. Webb	
Frontmatter	
More information	

Contents

Fig	gures and Maps	page x
Ac	knowledgments	xi
Int	roduction	1
I	Early Tropical Africa	18
2	Into Eurasia	42
3	Into the Americas	66
4	Bitter Medicines	92
5	Toward Global Public Health	127
6	Africa Redux	160
Сс	onclusion	188
Bil	bliography	191
Inc	dex	229

Figures and Maps

FIGURES

4.1.	Nineteenth-Century Quinine Manufacturers' Bottles	page 105
	Retail Prices of One Ounce of U.SManufactured	
	Quinine Sulphate, 1823–1897	114
5.1.	British Quinine to the World: The Warehouse of	
	Howards and Sons	152
6.1.	Global Population at Risk from Malaria from	
	Preintervention to 2010 (approx. 1900–2010)	181

MAPS

I.I.	Distribution of Duffy Antigen Negativity	
	(FY*0) in Africa	23
1.2.	Distribution of Hemoglobin S (Sickle Cell Gene S)	37
1.3.	Distribution of Tsetse Fly in Africa	39
5.1.	Distribution of Malaria in the Western Hemisphere,	
	circa 1920	141
5.2.	Distribution of Malaria in the Eastern Hemisphere,	
-	circa 1920	142
5.3.	Malaria Mortality in the United States and the	
	Principal Endemic Areas, 1900–1915	147
6.1.	Global Distribution of Malaria in 1970	173
6.2.	Global Distribution of Malaria in 2006	182

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This book is thus based in part on primary archival research on selected topics. But for the most part, owing to its scope as a global history, this is a project of synthesis. I have drawn on secondary literatures in regional histories and in world history and on scientific research articles and literature reviews for information about contemporary scientific knowledge. Most malaria research studies today are technical and disciplinarily bounded, and the volume of research is considerable. Over the years of researching and writing this book, the Institute for Scientific Information (ISI) Web of Science

xii

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