Preface

Before World War II the leading centers of bed bug research were in Germany and England. Taxonomic work on Cimicidae, based on the early collections of Rothschild and Jordan, was centered at the British Museum (Natural History) in London. The curator of Hemiptera there, W. E. China, was consulted by those engaged in studies of genetics, ecology, and taxonomy. The present study began in London in 1948 when Dr. China indicated that his plans for a world monograph had to be abandoned due to the pressure of other work.

The first step in taking up this project was to enlist the aid of the late G. F. Ferris of Stanford University, with whom I had worked on an earlier study of bat bugs of the family Polyctenidae. With great enthusiasm Professor Ferris set out to illustrate every species in characteristic dorsal/ventral view and to study the external morphology of *Cimex lectularius*. A preliminary report, with descriptions of new species, was published in Microentomology (Ferris and Usinger 1957), and several shorter papers appeared before Ferris' death in 1958.

In 1957 the work broadened and took a somewhat different turn. Emphasis shifted to a study of host selection (supported by grants from the U. S. Public Health Service) and the highly specialized internal reproductive structures (in collaboration with Dr. Jacques Carayon at the Museum d'Histoire Naturelle in Paris). Old and new species were studied in all the leading museums of the world, and colonies of live bugs were established in Berkeley from specimens collected on expeditions to South America in 1957, 1962, and 1964; to Africa in 1959; and to the Orient in 1957 and 1959. The availability of live bugs enlarged the scope of the work. Comparative studies of behavior, as well as experimental taxonomy, cytology, and genetics, became possible. Dr. Norihiro Ueshima collaborated in these studies and has prepared a summary of cytogenetics that is included in this book.

In many ways, this project has been a unique adventure. From museum taxonomy it has led to experimental studies of the nature of species and the processes of speciation. Field studies have led to bat roosts in hollow trees in Patagonia, to ancient tunnels of grave robbers in the pyramids of Egypt, and to hundreds of caves throughout the world. Field assistants