

I Introduction

The family Cimicidae includes the human bed bugs, the bat bugs, chicken bugs, swallow bugs, pigeon bugs, and others for which no common names have been proposed. Seventy-four species are recognized and arranged in 22 genera and 6 subfamilies. Half of the species have been discovered in the past 10 years during the course of this project.

The Cimicidae are related to the Anthocoridae, which prey on insects and mites and may occasionally bite warmblooded animals, and to the Polytentidae, which are permanent ectoparasites of bats. Cimicidae are only temporary ectoparasites, usually remaining in the nests or in cracks in rooms or roosts of their hosts between blood meals. They are not well adapted to cling to the fur or feathers of their hosts in flight but do so on rare occasions and are distributed in this way at least for short distances.

Twelve of the genera are associated exclusively with bats and 9 with birds. Only the genus *Cimex* has some species that are attached to bats and others that occur on birds. There are 3 human bed bugs: *Leptocimex boueti* Brumpt on bats and man locally in West Africa; *Cimex hemipterus* (F.) attacking man, chickens, and rarely bats throughout the Old and New World tropics; and *Cimex lectularius* L. associated with man, bats, chickens, and occasionally other domesticated animals over most of the world. The 2 last-named species of *Cimex* have followed man since the dawn of recorded history and contributed not only to his misery but also to his folklore, pharmacopoeia, and literature.

Scientifically, bed bugs are fascinating to study. Because they are easy to rear they are ideal subjects for classroom demonstrations and laboratory research.

ORIGIN OF HUMAN BED BUGS

It has been assumed by Sailer (1952) and others that *C. lectularius* was associated with man and bats when all three lived together in caves somewhere in the Middle East. The bugs later adapted to man-made dwellings and spread throughout the world as civilization advanced. Kiritshenko (1951) even thought that Vlassov (1929) had located an