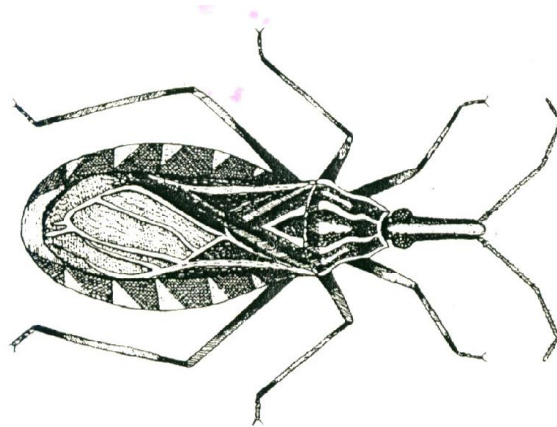


BUGS

TRIATOMINE BUGS

The blood-sucking species of reduviid bugs belong to the subfamily Triatominae. The principal species involved in the transmission of *Trypanosoma cruzi* are *Rhodnius prolixus*, *Panstrongylus megistus*, and species in Genus *Triatoma*. All medically important, species are found only in the southern USA, Central and South America. They are also known as cone-nose bugs, assassin bugs and kissing bugs. The adults are usually 2 - 3 cm long.



Adult *Rhodnius*, as example of a Triatomine bug

They are easily recognized by the long, snout-like head which bears a pair of prominent dark-coloured eyes, in front of which are a pair of laterally situated, long, thin, antennae. The proboscis is kept bent under the ventral surface of the head and swung forwards and downwards when taking a meal. The adults have 2 pairs of wings. The basal part of the fore wings is thickened and relatively hard, whereas the distal part is membranous. The hindwings are entirely membranous and are kept hidden under the forewings at rest.

The eggs are deposited in cracks and crevices in or near the habitation of their hosts. Small, pale, nymphs which resemble adults but lack wings, hatch out from the eggs after some weeks or months. The nymphs undergo 5 moults before turning into adults. A blood meal has to be taken between each moult for further development to occur. Nymphs and adults of both sexes feed at night on their hosts. Feeding is a lengthy process that takes 10 - 25 minutes or more. Many triatomine bugs defaecate while feeding and this behaviour is very important in the transmission of Chagas' disease. The most important vector species are those that are highly domestic and build up large colonies in suitable houses.

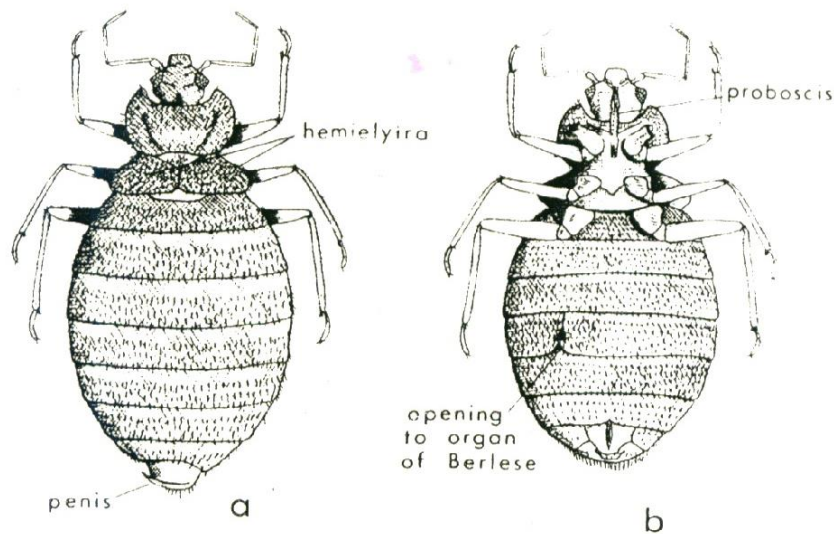
BED BUGS

Bed bugs are oval, wingless insects, about 4 - 5 mm long and flattened dorsoventrally. Both sexes take blood meals usually at night, and then retreat into their hiding places in crevices in beds, furniture and walls of houses. A Female lay one or two eggs a day which hatch in 4 days at temperature above 27, but take several weeks at 17 °C. There are 5 nymphal stages, each of which is blood feeding and maturity is reached in 5 to many weeks depending on the temperature and the availability of hosts. Although the bites of bed bugs may cause much irritation and itching, they are not known to be responsible for transmitting any disease.

There are 2 species, which commonly feed on man:

Cimex lectularis in temperate regions, and *Cimex hemipterus* in the tropics.

Control: Beds, bedclothes, furniture, floors and walls of infested houses should be sprayed with insecticide.



The bedbug, *Cimex hemipterus*. (a). Dorsal view of adult male; (b). Ventral view of adult female.