INTRODUCTION
Despite all efforts man has failed to keep the insect foes away from him. They not only destroy our crops but also act as agents of human and animal diseases. Control measures help in keeping pest populations below the threshold, but seldom provide a permanent solution of the problem. On the other hand, repeated and indiscriminate use of pesticides results in the contamination of the environment and insects become tolerant to chemicals rendering control operations ineffective. One reason for such failure of control operations could be the lack of knowledge about the particular pest species.

The bed-bugs are insects which belong to family Cimicidae of the order Hemiptera. This family contains nearly 74 species which suck the blood of mammals particularly that of human beings by reaching them. Unlike human lice, bed-bugs are not restricted to human blood, but they also feed on other mammals.

The species associated with human beings are Cimex hemipterus F. -the tropical bed-bug and Cimex lectularius L. -the common bed-bug. They can be distinguished by the shape of their pronotum which is rounded in C hemipterus whereas somewhat flattened towards the sides in C.lectularius. The head of the former species is not as broad or as long as that of the later. The abdomen is broadest at the level of
the 2nd segment in *C. hemipterus* while it is so at the level of 3rd segment in *C. lectularius*. Further, the former species is more adapted to higher temperatures.

The bed-bugs have long been suspected of transmitting various diseases. Bugs collected from natural habitat have been found harbouring many parasites like Wuchereria bancrofti (nematode) Trypanosoma cruzi (protozoan) and Coxiella burnetti (rickettsia) but there is no actual transmission. Infact bed bugs do not play a role in the transmission of these parasites and the diseases caused by them.

However, bed bugs are universally disliked by the human beings on account of allergic skin reactions and anaemia on long exposures as well as due to their characteristic and unpleasant smell of secretion from their two stink glands.

It was, therefore, proposed to study the behavioural responses of the bed-bugs both under normal conditions as well as following treatment with certain chemicals. Further the technical programme also included to observe the effect of starvation and frequency of feeding on the survival and oviposition, life cycle under high and low temperature and humidity conditions. Aside that, the colour preference by the bugs was also studied with a view
to find out the colour that would give largest attraction to the bed-bugs.

The toxic environment for the bed-bugs was created by treating the bugs with lethal and sublethal doses of insecticides belonging to different chemical groups separately.

Besides insecticides, bed-bugs were also exposed to chemosterilants of the alkylating group such as metepa and apholate to find out their effect on the reproductive potential of these bugs. Knipling (1960) suggested the concept of decreasing populations of rapidly reproducing organisms by reducing their birth rates rather than by increasing their death rates found its most striking application in the field of insect pests.