



J Econ Entomol. 2011 Feb;104(1):274-8.

## Effectiveness of bed bug monitors for detecting and trapping bed bugs in apartments.

Wang C, Tsai WT, Cooper R, White J.

Source: Department of Entomology, Rutgers University, New Brunswick, NJ 08901, USA. [cwang@aesop.rutgers.edu](mailto:cwang@aesop.rutgers.edu)

### Abstract

Bed bugs, *Cimex lectularius* L., are now considered a serious urban pest in the United States. Because they are small and difficult to find, there has been strong interest in developing and using monitoring tools to detect bed bugs and evaluate the results of bed bug control efforts. Several bed bug monitoring devices were developed recently, but their effectiveness is unknown. We comparatively evaluated three active monitors that contain attractants: CDC3000, NightWatch, and a home-made dry ice trap. The Climbup Insect Interceptor, a passive monitor (without attractants), was used for estimating the bed bug numbers before and after placing active monitors. The results of the Interceptors also were compared with the results of the active monitors. In occupied apartments, the relative effectiveness of the active monitors was: dry ice trap > CDC3000 > NightWatch. In lightly infested apartments, the Interceptor (operated for 7 d) trapped similar number of bed bugs as the dry ice trap (operated for 1 d) and trapped more bed bugs than CDC3000 and NightWatch (operated for 1 d). The Interceptor was also more effective than visual inspections in detecting the presence of small numbers of bed bugs. CDC3000 and the dry ice trap operated for 1 d were equally as effective as the visual inspections for detecting very low level of infestations, whereas 1-d deployment of NightWatch detected significantly lower number of infestations compared with visual inspections. NightWatch was designed to be able to operate for several consecutive nights. When operated for four nights, NightWatch trapped similar number of bed bugs as the Interceptors operated for 10 d after deployment of NightWatch. We conclude these monitors are effective tools in detecting early bed bug infestations and evaluating the results of bed bug control programs.

PMID: 21404868 [PubMed - indexed for MEDLINE]