

Study 25j

Laboratory Summary

A laboratory study was conducted using adult bed bugs from 3 different strains which ranged from susceptible to highly resistant to the pyrethroid deltamethrin. The objective of the study was to measure sub lethal effects which may result in changes in bed bug behavior following exposure to Temprid® SC Insecticide. An LT10 (lethal time of exposure resulting in 10% mortality) was determined for each strain using a residual deposit bioassay. Bed bug were exposed to Temprid applied to filter paper and bed bugs were exposed to the insecticide individually.

Blood consumption from feeding, was reduced 30, 23, and 58% for the three strains of bed bugs involved. General bed bug movement was also reduced following feeding as a result of sub lethal exposure to the insecticide.

This is important in that Temprid is a mixture of two insecticide each of which from a different class: the pyrethroid cyfluthrin and the neonicotinoid imidacloprid and reductions in feeding and movement should negatively influence the general well-being of the population.