## Study 5a

## **Laboratory Summary**

A laboratory study was conducted using adult bed bugs from 2 different strains at the University of KY. Strain CIN-1 was resistant and NY-1 was highly resistant to pyrethroids. Bed bugs were sprayed directly or confined to dry residues on Masonite or mattress fabric for 4 days or on other surfaces for 7 days.

Direct spray of CIN-1 bed bugs reached 80% mortality at 4 hours which was reduced to 73% by day 4. For dry residues on Masonite, mortality was 27% by day 1 and 67% by day 4. Results on mattress fabric was similar.

Direct spray of NY-1 bed bugs resulted in 10% mortality at 4 hours and 68% at day 7, while exposure to dry residues resulted in 12% mortality at 4 hours and 66% at day 7.