Study 43d

Laboratory Summary

A laboratory study was conducted where the Harlan susceptible strain and the combined FFI / CIN10 resistant strains were used to evaluate CimeXa™ Insecticide dust used to control bed bugs. The two substrates were previously treated at label rate of the test insecticide and aged 6 months prior to testing. The first 3 months of aging occurred with the petri dish lid off while the second 3 months had the lids on. The mixed adults/ late-stage nymphs were exposed to the treated substrate (upholstery fabric and ceramic tile) for 24 hours, then removed to clean filter paper lined petri dishes where mortality was read for another 24 hours.

CimeXa exposure resulted in approximately 27% mortality of susceptible bed bugs to the hard substrate and 20% to the soft substrate. The mortality of resistant bed bugs was approximately 50% for soft and 5% for hard substrates. It was theorized by the author that perhaps the hard substrate could not retain the fine, light particles of the insecticide compared to the soft substrate.