

Study 24d

Laboratory Summary

A laboratory study was conducted using bed bugs, (Indy and Irvington strain) that were moderately resistant to deltamethrin to evaluate MotherEarth™ D used to control bed bugs. Only the brief exposure test used both Indy and Irvington bed bugs. Other tests were completed with Irvington bed bugs only.

In a brief exposure test, bed bugs were allowed to cross a 2.54 cm band of dust that was applied to a cardboard panel and the resulting mortality read for 21 days.

In a forced exposure test, the bed bugs were continuously exposed to the test dust.

In a choice exposure test, the bed bugs could reside on the treated or untreated side of the panel.

The brief exposure resulted in 0 and 25% mortality at 1 and 10 days after exposure of Indy bed bugs to MotherEarth and 0 and 0% mortality for at 1 and 10 days after exposure to Irvington bed bugs. MotherEarth exposure also resulted in 75 and 100% mortality of bed bugs in the forced exposure test at 1 and 5 days and 5 and 95 % in the choice exposure test for 1 and 10 days after exposure.