

# REVOLUTIONARY BREAKTHROUGH IN BED BUG TEST

## Testing conducted by Rutgers University

Monday August 17 2009 @ 01:16 PM

Cedar Oil is advertised as a safe, effective insecticide for controlling a variety of public health pests including Bed Bugs. Bed Bug Central and Rutgers University have partnered to put a variety of Bed Bug products to the test. Cedar oil is the first in the series. "Natures Defender" Cedar oil was chosen due to the claims being made by the manufacture, to the public for use in controlling bed bugs.

Bed Bug Central funded Rutgers University's, Dr. Changlu Wang to conduct research that examined the effectiveness of "Natures Defender" cedar oil. The research examined the effectiveness of the cedar oil product on both bugs and eggs that were treated directly with the product as well as the residual effectiveness of the product once dry. This is a brief summary of the research findings. The product tested was, "Natures Defender" cedar oil. "Natures Defender" is a category 25b EPA exempt product. The bed bugs used in this research were from a field collected strain.

### Direct Spray on Bed Bugs and Eggs.

The direct spray of "Natures Defender" caused immediate immobilization of the bed bug nymphs, followed by 100% mortality within 1 minute of the topical application. In addition to being 100% effective on bugs directly treated with the product, it also proved to be effective against eggs that were directly treated. None of the 61 treated eggs hatched after 17 days compared to 75% egg hatch in a non-treated control group

The Results showed that "Natures Defender" is highly effective against bed bugs including eggs when applied directly.

### Additional Notes of Interest

We were quite surprised with the findings of this study, particularly when it came to the eggs. This prompted some additional investigation into the effectiveness of the two constituent materials, cedar oil (10%) and latex (90%). No mortality was observed when either generic cedar oil or latex were directly applied to bed bugs. This clearly raises some interesting questions regarding the effectiveness of the "Best Yet" cedar oil product. The fact that the each of the constituent ingredients are ineffective when tested alone suggests that there is something unique about the type of cedar oil or latex used by the manufacturer or that there is something about the formulation process that gives the "Natures Defender" product it's insecticidal activity.

Rick Cooper noted that Bedlam is one of the only products to have ovicidal effects for pests. "Best Yet" did show promising signs that it too, has this effectiveness on bed bugs. More research is needed to confirm this, but ultimately we found this very surprising and unexpected