

Testing Results

Evaluation of the Bed Bug Certified Mattress Encasement by Mattress Safe, Inc. in Preventing Bed Bug (*Cimex Lectularius*) Penetrating and Feeding

Snell Scientifics, LLC / Board Certified Entomologist

RESULTS / DISCUSSION:

The results of this study are tabulated in Tables 1-3. Table 1 illustrates the results from the Mattress Safe® Bed Bug Certified Mattress Encasement fabric “feed through” evaluation, and Tables 2 and 3 show the results from the zipper “shake through” and “feed through” evaluations.

The fabric “feed through” method was conducted with a section of the laminated fabric that was removed from the encasement. The method was used to evaluate if bed bugs (*Cimex lectularius*) could penetrate and feed through the fabric when a human host was present. As is illustrated in Table 1, the laminated fabric successfully prevented bed bugs from penetrating and feeding through the fabric and onto the human host.



The zipper section of the encasement was constructed with the laminated fabric on one side of the zipper and a non-laminated fabric on the other side. With the expectation that bed bugs would feed through the non-laminated fabric, the non-laminated side was covered with tape before testing. Based on the design of the encasement, it was only necessary to evaluate the zipper section and the laminated fabric side, as the laminated side is designed to cover the top side of the mattress and would be the fabric type that the human would be in contact with. As the results show in Table 3, no bed bugs fed through the laminated fabric, the zipper enclosure, or the zipper seams during the 15 minute evaluation. The zipper closure also prevented bed bugs from escaping during the study and prevented debris from passing through the zipper during the 30 second shake through method.

Therefore, the results of the study indicate that the Bed Bug Certified Mattress Encasement by Mattress Safe, Inc. can prevent penetration and feeding when used as a barrier between bed bugs (*Cimex Lectularis*) and humans.

Table 1

Fabric Feed Through Method: Laminated Fabric					
Rep	Bed Bug Stage	Approx #	# Fed	# Escaped	# Blood Spots on Fabric
A	Mixed	~ 500	0	0	0

Table 2

Zipper Shake Through Method: Zipper Encasement					
Rep	Bed Bug Stage	Approx #	# Fed	# Shaken Through	# Escaped
A	Mixed	~ 500	0	0	0

Table 3

Zipper Feed Through Method: Zipper Encasement				
Rep	Bed Bug Stage	Approx #	# Fed	# Escaped
A	Mixed	~ 500	0	0



Mattress Safe, Inc.
P.O. Box 2267
Cumming, GA 30028
p.770.205.5335
f. 770.205.5322
www.MattressSafe.com