



Sponsor: Bargoose Home Textiles      Date: June 2011  
Study: Bed Bug Prevention of Mattress Covers 2011  
Trial: Bed Bug Fabric Feeding Prevention  
Test Method: 314-2.00

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**Report Title:**

Evaluation of 6 Gauge Vinyl Fabric in Preventing Bed Bug (*Cimex lectularius*) Penetration and Feeding when Presented With a Human Host

**Study:**

Bed Bug Prevention of Mattress Covers 2011

**Trial:**

Bed Bug Fabric Feeding Prevention

**Experimental Start Date:**

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## Table of Contents

Table of Contents.....	2
Objective(s).....	3
Test Substances.....	3
Materials and Methods.....	3
Additional Details.....	4
Results.....	5
Tables.....	6
Appendix A: Photographs.....	7
Appendix B: Raw Data.....	9
Appendix C: Test Substance Receiving Log.....	11

**Objective(s):**

To determine the efficacy 6 Gauge Vinyl Fabric in preventing bed bug (*Cimex lectularius*) penetration and feeding when presented with a human host.

**Test Fabrics/Encasements:**

1. 6 gauge Vinyl Fabric (Snell Code: 060811-1-D-BAR)

**Materials and Methods:**

The following is the Snell Scientifics Standardized Testing Method for evaluating the efficacy of fabrics and/or encasement closures when used as barriers against hematophagous arthropods. Further details related to this specific study are described following the test method summary. Select action items and illustrations have been removed from this standardized test method in an effort to make the report more precise and accurate to the study conducted. Any details removed from this test method were deemed irrelevant to the study conducted in this report.

314.1      Materials:

- 314.1.1      Fabrics- Test fabric.
- 314.1.2      Glass jar – Pint size jar w/ screw on lid.
- 314.1.3      Cardboard – Harborage inserts inside jars.
- 314.1.4      Feeding attractant – Human subject to attract bed bugs.
- 314.1.5      CO2 and regulator – Standard 20 pound cylinders and gas regulator - used for anesthetizing insects.
- 314.1.6      Intermediate transfer/holding chambers – Used for housing insects after they have been removed from their primary breeding housing. Intermediate chambers were used to anesthetize insects and sort them into jars.
- 314.1.7      Count down timer – Used to accurately measure exposure times.



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## Results / Discussion:

The results of this study are tabulated in Table 1. Table 1 illustrates the results from the 6 gauge Vinyl Fabric “feed through” evaluation.

The fabric “feed through” method was used to evaluate if bed bugs (*Cimex lectularius*) could penetrate and feed through the test fabric when a human host was present.

The results of the study showed that the 6 gauge Vinyl Fabric has the ability to prevent bed bug penetration and feeding when used as a barrier between bed bugs (*Cimex lectularius*) and humans.