

# 2016



[Bed-Bugs.co.uk](http://Bed-Bugs.co.uk)

Useful information and professional treatment solutions.

Bed Bugs Limited

Prepared by David Cain

## Information about Carpet Beetles - Dermestidae

Check for the latest copy at:

[www.Bed-Bugs.co.uk/carpetbeetles.html](http://www.Bed-Bugs.co.uk/carpetbeetles.html)

# INFORMATION ABOUT ALLERGIC REACTIONS TO CARPET BEETLE HAIRS – BRACHIATING URTICARIA

PRIVATE AND CONFIDENTIAL ALL MATERIALS STRICTLY COPYRIGHT AND  
COMMERCIALY IN CONFIDENCE © Bed Bugs Ltd 2016  
Company Number 5905112 VAT Number 911 9740 24 Page 1

## Contents

|                          |   |
|--------------------------|---|
| Forward:.....            | 3 |
| Overview:.....           | 3 |
| Images.....              | 4 |
| Larvae.....              | 4 |
| Adults.....              | 5 |
| Symptoms / Bites.....    | 6 |
| Solution.....            | 6 |
| Links.....               | 7 |
| About this document..... | 7 |



## Forward:

This document deals with a subject that is not widely acknowledged at present in the entomological, medical or pest control industry. It is based on our extensive observations deal with Bed Bugs and examining home with no signs of Bedbugs and finding carpet beetle skins. Some people have allowed us to test their skin for reactions which has confirmed this theory. Most importantly there is no chemical / insecticide solution to this problem as it is an allergen issue not a biting insect problem. Please do not harm your health or the environment by attempting to treat this problem chemically.

## Overview:

Carpet beetles are cariophites which means they live on dead organic materials, in particular wool, natural fibres and feathers. They naturally occur in most homes and in our experience, they can be found in over 98% of homes if you are prepared to look hard enough.

Carpet beetles are another pest which appear to cause a biting response and may be linked to ongoing bite like activity in people exposed to bed bugs. Although there is no clinical data to support this stress / exposure induced chitin hypersensitivity can mean that post exposure people become sensitive to different types of insects including carpet beetles.

It appears that the build up of static causes the micro fine hairs on the larvae to impale themselves in the surface of people skin. Thus creating a small pin prick like wound that can respond and look similar to an insect bite. Although again there is little to no clinical data in the area we certainly see more cases in people under high personal and environmental stress as well as those with low immune systems.

The life cycle of carpet beetles has a complete metamorphosis, the most commonly found form is the larvae which are often termed "woolie bears". They are a small hairy caterpillar / maggot the skins of which can often be found in dark places and are most commonly a honey brown banded colour. These skins are difficult to isolate because they are so light and will often get disturbed by the lightest of breezes.

The adult beetles are a grey mottled colour although samples are rarely seen. The pictures below document a recent larval sample isolated from a property investigated for bed bugs. You may also find fabric damage in the areas that they have been.

There are likely to be other forms of carpet beetles but these are the only species I have seen in the UK over the last 5 years.

## Images

### Larvae



## Adults





## Symptoms / Bites



Bite Like reactions to carpet beetles can appear similar to Bedbugs as illustrated in the image above. Another reason why bites alone are not an accurate way of diagnosing an insect problem.

They are technically a medical condition called brachiating urticaria where the piercing of the skin causes a reaction, either as a result of the insertion of a foreign object into the skin or as a reaction to pollution that enters this open wound.

If you have an aggressive reaction seek medical assistance, if the reaction forms a fluid filled blister seek immediate emergency medical assistance as you may be having an anaphylactic reaction.

## Solution

The problem is in essence two issues, and how they interact.

- The static differential
- The larval hair or fibers present

The first and easiest to resolve is the static.

1. Remove shoes and socks in the area
2. Increase the relative humidity to eliminate the “dry air”

To resolve an issue relating to carpet beetles you must successfully remove all allergens from the area. Although this can be done with a vacuum cleaner if must have a HEPA filter fitted to ensure that it does not release more of the fibers into the atmosphere.

Once a thorough cleaning of all surfaces has been conducted the area should be misted with distilled water (or water that has boiled in the kettle and been left to cool). This last step is essential to reducing static pockets that are often generated by the electromagnet motor in the vacuum cleaner.

Some air purifiers and especially the ones that work on the GoodSpehere™ principles will not only resolve the relative humidity but will also “wash out” the fibers from the air.

As the irritant is dead organic material treatment with any form of insecticide will not be effective in the long run and the ionic nature of most insecticide formulations can actually make the matter worse after a few days' relief.

## About this document

This document is provided for public information and to assist people in correctly identifying pest related issues.

Due to the focused nature of our work we are not able to enter into extensive correspondence on this subject outside of consulting agreements. If you wish to discuss the subject of this document in domestic or commercial settings, please email [info@bed-bugs.co.uk](mailto:info@bed-bugs.co.uk) for a consultation quotation.

-<\*END OF DOCUMENT\*>-