14 December 2011 Last updated at 08:35

**BBC**

**Hairy limbs keep bed bugs at bay**

Hairier skin may be the key to avoiding being bitten by bed bugs, claim Sheffield academics.

Hungry bugs placed on shaved arms were more likely to try to feed compared with those on unshaved arms, the journal Biology Letters reported.

Researchers say the hair slows down the bed bugs and warns the victim.

Pest controllers say the UK is currently experiencing a steep rise in the number of bed bug infestations.

Prof Michael Siva-Jothy, from Sheffield University's Department of Animal and Plant Sciences, recruited 29 brave volunteers to test the theory further, watching the bedbugs as they found a place to feed and removing them only as they were about to bite.

He found that more layers of both longer visible hairs and finer, "vellus" hairs near the surface appeared to work as a deterrent to the insects, with the finer hairs also acting as an early warning system.

Prof Siva-Jothy said: "Our findings show that more body hairs mean better detection of parasites - the hairs have nerves attached to them and provide us with the ability to detect displacement."

He said they also slowed down the insect as it searched for a tasty spot to bite.

"The results have implications for understanding why we look the way we do, what selective forces might have driven us to look the way we do, and may even provide insight for better understanding of how to reduce biting insects' impact on humans."

However, even though men are naturally hairier than women, they do not appear to be bitten less often.

Professor Siva-Jothy suggested this pointed to an evolutionary battle between bed bugs and their prey, with the insects adapting to automatically head for relatively hairless bits of the body, such as wrists and ankles.

He added that extreme hairiness might also be more of a disadvantage than an advantage.

"If you have a heavy coat of long thick hairs it is easier for parasites to hide, even if you can detect them.

"Our proposal is that we retain the fine covering because it aids detection and if we lost all hair, even the relatively invisible fine hair, our detection ability goes right down."

Evolutionary pressure

This tallies with other studies which look at how humans came to be relatively less hairy than apes.

Other scientists have suggested that swapping thicker fur for clothes was a way of making insect bites and parasitic infestations less likely.

Prof Mark Pagel, an evolutionary biologist at the University of Reading, said that biting parasites remain a major cause of disease and death worldwide, making them a potentially enormous evolutionary pressure on early man.

He said: "This vellus hair is certainly no use for anything else, so it is a reasonable hypothesis that it developed in response to a strong selective pressure in our past.

"Mammals are unique in developing this wonderful fur, and humans are the only mammals to jettison it, so there must have been a very good reason to do so."

DAILY MAIL (London)

December 14, 2011 Wednesday

**LENGTH:** 179 words

**A HAIRY BODY CAN MEAN THE BED** **BUGS WONa€™T BITE**

Daily Mail Reporter

FINDING hairs in your food can be disgusting, and it seems that blood-sucking insects feel just the same.

Scientists have discovered that hairy people are better protected from parasites, as the hair makes it harder for the bugs to reach skin.

Bed bugs and other parasites such as mosquitoes, midges and ticks prefer relatively smooth areas, such as the wrists and ankles.

But as the insects search for somewhere to dive in, the nerves in hairs also increase the chances of them being felt on the skin and swatted away.

The discovery may also explain why humans retained a body-covering of fine hair as they evolved.

Study leader Professor Michael Siva-Jothy, from the University of Sheffield, said: a€˜We retain the fine covering because it aids detection, and if we lost all hair, even the relatively invisible fine hair, our detection ability goes right down.a€™

The scientists are investigating the habits of parasitic insects to find more effective ways of controlling them and the diseases that they spread.

The Daily Telegraph (London)

December 14, 2011 Wednesday   
Edition 2;   
National Edition

**Body hair 'helps keep biting insects at bay'**  
**SECTION:** NEWS; Pg. 10  
  
**LENGTH:** 132 words

DOWNY hair on skin is not a pointless evolutionary hangover but is needed to deter biting insects, say scientists.

A study found that the sensitive hairs help us feel small insects on our skin, and act as a barrier that stops them from sinking their teeth in.

Body hair makes it difficult for parasitic insects such as bed bugs, mosquitoes and midges to feed.

Nerves attached to the hairs alert us to their presence and allow us to swat them off, which is why bugs favour relatively hairless areas, such as wrists and ankles.

Researchers at the University of Sheffield asked 29 volunteers to shave one of their arms, before bed bugs were placed on their skin.

The results, published in the Royal Society journal Biology Letters, showed that the arms that had not been shaved received fewer bites.

The Mirror

December 14, 2011 Wednesday   
Eire Edition

**BODY HAIR DOESN'T LET BED BUGS BITE;**SCIENCE  
  
**BYLINE:** MIRROR REPORTER  
  
**SECTION:** NEWS; Pg. 17  
  
**LENGTH:** 98 words

BODY hair protects us from bed bugs, scientists have discovered.

Tiny, sensitive, almost invisible hairs which cover our skin alert us to biting insects like a body alarm system.

They also make it difficult for insects and other parasites to climb over and settle on us.

It is why when we get bitten it is often on hairless areas like the ankles and wrists.

The discovery was made after volunteers agreed to be shaved and then had bugs dropped on them.

Researcher Professor Michael Siva-Jothy said: "The hairs have nerves attached to them and provide us with the ability to detect displacement."

The Times (London)

December 14, 2011 Wednesday   
Edition 1;   
Scotland

**Night night, sleep tight, hairy arms stop bedbug bites**  
**SECTION:** NEWS; Pg. 22  
  
**LENGTH:** 102 words

Sheffield Being hairy helps prevent people being bothered by biting insects because hair makes it harder for the creatures to feed, research suggests.

Hairiness also increases the chances of insects being felt and swatted away.

Scientists at the University of Sheffield studied 29 volunteers who had one arm shaved before bedbugs, pictured right, were placed on their skin.

The results showed that people with more hair were more protected, which may explain why humans still have a body-covering of fine hair.

Bedbugs and other parasites prefer relatively hairless areas such as wrists and ankles, the scientists say.