



請注意：中文文字内容只提供簡體版

科学家可能已找到对付臭虫（又称床虱）的办法。这类昆虫非常难控制，不过近期的科研结果有希望帮助科学家们研制出一系列新的、更有效的控制这一害虫的方法。请听来自 BBC Rebecca Morelle 的报道：

They feast on our blood while we sleep - leaving **itchy**, red **welts** as their **calling card**. Bedbugs are an insect that many would like to see the back of. But in North America, Europe and Australia, **infestations** are on the rise - and our **insecticides** are losing their bite.

Researchers at the University of Kentucky in the US have found 14 genes associated with resistance to these chemicals. They're causing a number of biological changes in the bedbugs. These include the development of a thicker skin that stops the poisons from **penetrating** and **mutations** within the insects' bodies that prevent the **toxins** from hitting the nervous system.

The genes linked to these changes are active in the insect's tough outer shell - creating a **formidable** first line of defence. These findings could help scientists to develop new insecticides that could either turn these genes off or bypass the pest's molecular shields.

But until these substances are developed, **exterminators** are having to resort to more primitive tactics.

Questions

1. True or False? *The number of bedbugs is rising in North America, Europe and Australia.*
2. True or False? *Researchers in the US found 14 genes inside bedbugs that are resistant to insecticides.*
3. Which biological changes are caused by the 14 insecticide-resistant genes found in the bedbugs?
4. Why do bedbugs have a formidable first line of defence?

Vocabulary and definitions

itchy	发痒的，瘙痒的
welts	红色肿块
calling card	（留下来过的）标示、证据
infestations	（害虫）大批出没、猖獗
insecticides	杀虫剂，杀虫药
penetrating	渗透，进入
mutations	（基因）变异
toxins	毒素
formidable	强大的，难以对付的
exterminators	消除有害动物（如害虫）为职业的人

Answers to the questions

1. True or False? *The number of bedbugs is rising in North America, Europe and Australia.*

Answer: True. Infestations are on the rise in North America, Europe and Australia.

2. True or False? *Researchers in the US found 14 genes inside bedbugs that are resistant to insecticides.*

Answer: True. Researchers at the University of Kentucky in the US have found 14 genes associated with resistance to the insecticides.

3. Which biological changes are caused by the 14 insecticide-resistant genes found in the bedbugs?

Answer: The changes include the development of a thicker skin that stops the poisons from penetrating and mutations within the insects' bodies that prevent the toxins from hitting the nervous system.

4. Why do bedbugs have a formidable first line of defence?

Answer: Because the genes linked to the biological changes are active in the insect's tough outer shell.