

BED BUGS KEEPING YOU AWAKE?

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Female bed bugs have developed a way to protect themselves from the injury or infection that could occur after traumatic insemination. Males have not developed this protection so an accidental mating can lead to serious injury.

(8) In developed countries, bed bugs were almost wiped out in the 1940s but began to increase in numbers again in the 1990s. This rise occurred as they became more pesticide resistant. They also benefitted from increased international travel which carried them from country to country. They like to live in bed linens, mattresses and headboards, but can be found in many other places like suitcases, picture frames and wall sockets.

(9) Once a home is infested with bed bugs, they can be difficult to get rid off. They can live up to 1 year without a blood meal. Eradicating them often involves non-pesticide methods. One common method is to use extreme temperatures against them. They can be killed if they are exposed to a temperature of 45°C/113°F for over one hour or -17°C/1°F for two hours. Bed linens and clothes you suspect of having bed bugs can be put into the drier for an hour to kill the insects. Bed bugs live for around 9 months and during that time a single female can potentially produce up to 500 offspring in a few weeks. This is more than enough to cause an infestation if even one healthy female bed bug is in your home.

Article Questions

- 1) Besides the bed bug, can you name two other organisms that are also hematophagous?
Various, including mosquitos and leeches.
- 2) What is the difference between the term ecto and endo?
Ecto means to be on the outside of a body and endo means to be on the inside of a body.(2)
- 3) How do bed bugs prevent humans from waking up from the bed bug bite?
Within their saliva, the bed bug injects painkillers into their victims.(5)
- 4) Why do some people react to the bite of a bed bug?
They are allergic to the chemicals (anticoagulants or painkillers) found in the bed bug saliva.(6)
- 5) Describe the process of traumatic insemination. What does the female do with the sperm she receives?
In traumatic insemination, the male punctures the female's abdomen with its needle-like genitalia and deposits the sperm into her body cavity. The female stores the sperm in her seminal conceptacles until she needs to use it to fertilize her eggs.(7)
- 6) Why are male bed bugs sometimes accidentally injected with sperm by other male bed bugs?
Bed bugs can only tell the difference between male and females due to their size. Since females are typically bigger, they are chosen by males for mating, but a larger male can be sometimes mistaken for a female.(7)
- 7) What has caused cases of bed bug infestations in developed countries to increase over the past few decades?
 - 1) Increased pesticide resistance by the bed bugs.
 - 2) Increased international travel that can carry the bed bugs from country to country.(8)
- 8) How can you get rid of bed bugs?
 - 1) You can heat them to 45°C/113°F for over one hour or
 - 2) Freeze them at -17°C/1°F for two hours.(9)