

Resurgence of the beastly bedbugs

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“Sleep tight—don’t let the bedbugs bite” is a phrase as common as “Happy birthday to you” in American culture. But in the past three decades the tiny insects known as bedbugs (*Cimex lectularius*) have become more and more prevalent (figure 1). Their unexpected resurgence in America after decades of low numbers is probably due to a number of factors. The pesticide DDT was banned from use in 1972, they have become increasingly resistant to other pesticides, and worldwide travel has greatly increased, all contributing to their reappearance. These ectoparasites (external parasites) emerge from bedding and furniture to bite people in apartment complexes, motels, college dorms and the like. Controlling bedbug infestation includes the judicious use of insecticides and a high level of domestic cleanliness and sanitation.



Figure 1. The common and annoying bedbug, a flightless external parasite that feeds on blood, has experienced resurgence in recent years.

Bedbugs are found throughout the world and they are mainly nocturnal, being most active just before dawn. Two species have been identified that attack people: the common bedbug and the tropical bedbug. Fortunately, they do not transmit human diseases—they are just a pesky, irritating blood-feeder with their saliva causing allergic reactions in some people. Their bites rarely require treatment. Perhaps you have experienced cimicosis—or bedbug bites. These creatures feed by probing the skin of a person or animal (e.g. rodent) with their compact mouth parts called the *stylet fascicle* or *rostrum*, composed of the *maxillae* and *mandibles* (figure 2). The *fascicle* enters the skin until a tiny blood vessel is encountered, then only the maxillary bundle enters the vessel to obtain blood. A bedbug typically feeds once a week or more and can survive without a meal for up to two, possibly three, months.

Insecticide resistance

Bedbugs becoming resistant to various insecticides over time have been reported but this has nothing to

do with their origin or their supposed evolution into a different insect. Indeed, insecticide-resistant insects have been shown to be *less* fit in the wild compared to the normal ‘wild type’.¹ Furthermore, evolution has never been observed to produce new genetic information that would result in pesticide resistance. Instead, there are other, non-Darwinian explanations such as eukaryotes (e.g. insects) having unique molecules called cytochrome P450. This superfamily of enzymes is designed to catalyze the oxidation (degradation) of organic compounds like pesticides.

Where did bedbugs come from?

So where did bedbugs come from? A secular text states, “*C. lectularius* may have originated in the Middle East in caves” shared by bats and humans.² A recent parasitology textbook addresses nothing on bedbug origin or their supposed evolution. The authors do use questionable words such as ‘believed’ and ‘assume’ when discussing Cimicidae ancestry (Cimicidae is the family to which bedbugs belong)³. The Cimicidae belong to the insect order Hemiptera (the true bugs—that includes the suborders Homoptera and Heteroptera). But like all the other insect orders, virtually nothing is known regarding hemipteran origin or evolution. For example, in 2008 a fossil cimicoid bug was discovered in mid-Cretaceous amber. According to the author it “shares many features with the bedbug family” and is tentatively placed in the family Cimicidae.⁴

As predicted by creationists, hemipterans have always been hemipterans, as far back as the early Permian some 290 million years ago (according to deep evolutionary time). Trautwein *et al.* has an interesting article entitled “Advances in Insect Phylogeny [evolution] . . .”. However, the authors state:



Figure 2. A Scanning electron micrograph of a bedbug showing its long skin-piercing mouthparts.

“Mapping the evolutionary relationships of insects, with their stunning diversity, remains a challenge, even in the light of new theory and technology.”⁵

They added, “understanding their evolutionary relationships is key to understanding the evolution of life”.⁶ *But they have no evolutionary relationships.* Insects have always been insects.

Does secular science know where the Phylum Arthropoda came from (which includes also *all* insects)? Evolutionists do not know.⁷ Creationists see this large phylum as being created on Day 6 of the Creation Week just thousands of years ago.

Original food source

Like the mosquito, female bedbugs utilize protein meals (i.e. blood) for egg production. They may have been plant feeders before the Curse.⁸ In fact, two evolutionists recently stated, “Like Homoptera [a suborder of bugs that are all plant feeders], most heteropterans [plant bugs] suck plant juices”⁹

There have been interesting studies conducted in regard to other external parasites, leading some authors to suggest:

“... the magnitude and even direction of survival effects can vary depending on the type of ectoparasite and the nature and duration of the association.”¹⁰

Research continues as creation scientists attempt to answer questions such as this and other predator/prey relationships.

References

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