

Published: July 31, 2023

Citation: Salerian AJ, 2023. Do Some Infections Develop Independent of Contamination?, Medical Research Archives, [online] 11(7).
<https://doi.org/10.18103/mra.v11i7.2.4184>

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DOI
<https://doi.org/10.18103/mra.v11i7.2.4184>

ISSN: 2375-1924

RESEARCH ARTICLE

Do Some Infections Develop Independent of Contamination?

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Abstract

Background: It has been suggested that life began from sterile organic matter and the first microorganisms have evolved to complex multicellular organisms. Also, it has been hypothesized that some infections may derive through diverse pathways independent of contamination or oviposition.

Objective: The aim of this study is to demonstrate that microorganisms and flies may derive from sterile organic matter.

Methods: Three intact eggs in a tightly closed jar were sterilized using standard 2,450-MHz microwave irradiation for 5 minutes, were placed outdoors in ambient conditions for three weeks and were shipped to Anresco labs in San Francisco, CA.

Results: 130 million *Bacillus atropheus* and *bacillus amyloliquefaciens*. There were more than 20 flies outside of the jar and inside on the cap of the jar. Most of the flies were in the pupa stage and some were already adults. All the flies were identified as Hump Backed Flies Family Phoridae.

Discussion: Our experiments support both the hypothesis that life began from sterile organic matter and the Darwin's theory of evolution. Furthermore, it seems that some opportunistic, viral infections and myiasis maybe endogenous.

Conclusion: Some infections may be endogenous.

Keywords: Darwin; Evolution; Burn wound and opportunistic infections; Endogenous infections: Myiasis.

Highlights:

- The aim of this study is to demonstrate that microorganisms and flies may derive from sterile organic matter consistent with the Darwinian theory of evolution.
- Microwave sterilized eggs developed microorganisms and flies after three weeks in ambient temperatures and in sterile conditions.
- Our study validates that life began from sterile earth and supports the Darwinian theory of evolution.
- Some infections may be endogenous and develop independent of contamination or oviposition.

Background:

Blow flies (Calliphoridae -Diptera), crucial participants in the mammalian decomposition^{1,2,3,4} are known as the causative agents of myiasis by oviposition on human or other vertebrates' necrotic or living tissues^{1,2}. It has been hypothesized that some myiasis may develop from less complex microorganisms and independent of oviposition⁵ consistent with the Darwinian theory of evolution⁶. Furthermore, this novel hypothesis, have been supported by two studies:

1. Blowflies were found in the body of an accident victim in a dark cave in the Swiss Alps⁷. Because blowflies cannot fly in darkness^{8,9,10}, this observation suggested that the blowflies had developed independent of oviposition.

2. Carrion placed in a dark cave was infested by blowflies⁴. Because blowflies cannot fly in darkness^{8,9,10} this observation suggested that the blowflies had developed independent of oviposition.

Objective:

To demonstrate that flies may develop from less complex microorganisms consistent with the Darwinian theory of evolution and independent of oviposition.

Methods:

Three intact eggs in a tightly closed jar were sterilized in a microwave for 5 minutes, were kept in ambient conditions in New Orleans, LA for three weeks and shipped by FedEx via air to Anresco labs in San Francisco, CA. The eggs remained in the tightly closed jar and the jar was placed in a tightly closed plastic FedEx envelope to prevent contamination. Samples were planted from a -4 to 8 -dilution in anticipation for high counts. No growth in lowest dilution is reported in less than 10,000 cfu/g. One colony of sample plate was submitted to Midi labs for DNA sequencing.

Results:

130 million Bacillus atropheus and bacillus amyloliquefaciens..There were more than 20 flies outside of the jar and inside on the cap of the jar. Most of the flies were in the pupa stage and some were already adults. All the flies were identified as Hump Backed Flies Family Phoridae

Table 1: Anresco Report

Samples were planted from a -4 to 8 -dilution in anticipation for high counts. No growth in lowest dilution is reported in less than 10,000 cfu/g.

There may be many different types of organisms on each of the agar. Only one colony of sample plate was submitted to Midi labs for DNA sequencing.

Content: Eggs with shells

Bacillus atropheus and bacillus amyloliquefaciens..There were more than 20 flies outside of the jar and inside on the cap of the jar. Most of the flies were in the pupa stage and some were already adults. All the flies were identified as Hump Backed Flies Family Phoridae.

Discussion:

The dual findings -the microbial growth and the emergence of flies- suggest that sterile eggs produced microorganisms which were evolved into multicellular flies independent of oviposition. To my knowledge this is the first study to demonstrate that sterile organic matter can produce microorganisms and flies(more complex multicellular organisms).

Also, of significance this is the first study to show that flies may develop independent of oviposition.

Our findings may have other implications related to two fundamental paradigms, the origin of life from organic matter and the Darwinian theory of evolution. In essence, this may also be the first study to demonstrate that these two classic paradigms are correct. The transformation of sterile organic matter

to microorganisms supports the origin of life from sterile organic matter. The emergence of microorganisms and flies from sterile organic matter is consistent with the Darwinian theory of evolution at least partially and without any support for the environmental conditions facilitating the survival of the fittest. Darwin's theory of evolution suggests that all species share a common ancestor - the first microorganisms - and all species may have two possible origins, reproduction or evolution from a less complex organism⁶. This dual pathway may be observed in the evolution of blow flies in a predicted schedule and sequence in the evolution of more complex microorganisms from less complex microorganisms during the mammalian decomposition^{1,2,3}.

Is it possible that our findings are erroneous due to possible contamination?

The eggs were sterilized by a "home-type" microwave oven (2.45 GHz) which was reported to completely inactivate bacterial cultures, mycobacteria, viruses, and *G. stearothermophilus* spores within 60 seconds to 5 minutes¹¹. However, it has been suggested that higher power microwaves in the presence of water may be needed for sterilization¹¹. The origin of life on earth¹² and a previous study showing evidence of fermentation of eggs sterilized in boiling water for five minutes¹³ suggest the microbial growth is very unlikely to be due to contamination.

Furthermore, ultra-high-temperature-sterilized milk has a shelf life suggesting it may spoil and it has been shown that it is possible to elicit gelation - a crucial process of fermentation - of ultra-high-temperature-sterilized milk by proteases from a strain of *Pseudomonas fluorescens*¹⁴.

The possibility of oviposition during transportation cannot be dismissed. However, the Hump Backed Flies Family Phoridae were found in the plastic tightly closed bag. Hence, oviposition was virtually impossible. It seems reasonable to consider that, the changes in air pressure loosened the lid of the jar during the flight from New Orleans to San Francisco.

Future studies are necessary to validate our findings. To my knowledge, this is the first.

What do our findings represent for clinical medicine?

It seems likely that some, myiasis may develop independent of oviposition and some or possibly the great majority of opportunistic and fungal infections are endogenous and not caused by foreign invading pathogens.

Conclusion:

Our findings seem to validate Darwin's theory of evolution and the hypothesis that life on earth began from sterile organic matter. Furthermore, it seems that myiasis and most opportunistic and fungal infections are endogenous.

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