Jihene Bettaieb et al., Epidemiology (Sunnyvale) 2015, 5:3
http://dx.doi.org/10.4172/2161-1165.S1.012

OMICS International
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3rd International Conference on
Epidemiology & Public Health

August 04-06, 2015 Valencia, Spain

Molecular evidence of *Leishmania major* in *Sergentomyia* minuta in Tunisia

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Introduction: Phlebotomus species are known to be the transmission vectors of *Leishmania* (L.) in different areas of the world. However, some researchers have hypothesized that *Sergentomyia* (S.) genus phlebotomine sand flies are capable of transmitting *Leishmania* parasites.

Materials & Methods: Sand flies were collected from south Tunisia in 2013. DNA was extracted from individual sand flies and parasite DNA was detected by PCR amplification of the ribosomal internal transcribed spacer 1 and DNA sequencing.

Results: *L. infantum* DNA was identified in one specimen of *S. dreyfussi*. This is the first report of *Leishmania* DNA detection from naturally infected wild-caught *S. dreyfussi*. Our finding supports the assumption that *L. infantum* transmission via *Sergentomyia* is possible.

Conclusion: Currently, no local data is available on infecting *Sergentomyia* ssp determining whether *Sergentomyia* is a potential vector of *Leishmania* is crucial to understanding the parasite–vector transmission cycle in different areas of the world.

Biography

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