

ORAL PRESENTATION

Open Access

Phlebotomine sand flies on the crossroads of Anatolia: transmitted diseases and vectors

O Kasap Erisoz¹, A Belen², C Alkan², F Gunay¹, V Dvorak³, K Ergunay⁴, S Aydın⁵, J Votykka³, A-L Banuls⁶, R Charrel², A Özkul⁷, Y Özbel⁸, P Volf³, B Alten^{1*}

From The 1st Conference on Neglected Vectors and Vector-Borne Diseases (EurNegVec): with Management Committee and Working Group Meetings of the COST Action TD1303 Cluj-Napoca, Romania. 8-11 April 2014

The Western Palearctic (WP) is composed of Europe, Middle East and North Africa. In this territory, the Mediterranean Sea, and the land under the influence of the Mediterranean Sea is the most important geographical character for both migration and dispersion of organisms; especially for invertebrates including sand flies. Anatolia (Asia-Minor) takes place on the crossroads of this area and these events.

The phlebotomine sand flies (Diptera: Psychodidae, Phlebotominae) are vectors of several infectious pathogens causing leishmaniasis and arbovirus infections due to phleboviruses. Several of these diseases have wide geographical distributions in the WP, and give rise to occasional epidemic outbreaks. In numerous countries, increasing risk factors are making sand fly-borne diseases a major public and veterinary health problem. Many studies on phylogenetic relationship among sand fly taxa, their distribution, population structure and diseases of phlebotomine species have been already published, but there are still many gaps waiting to be filled up in, especially, Anatolia. In this point, scientists have to discuss some deficiencies under cover of geography, history and phylogenetic studies to understand the mechanisms of distribution of both sand fly species and their pathogens in Anatolia.

In this presentation, updates in distribution of sand fly species with state of art maps of EU-VBORNET project, possible new species, leishmaniasis and phleboviruses epidemiology will be discussed with an emphasis on several studies performed by our group between 2000 and present in Anatolia.

Studies were supported by EU-FP7 Edenext project, HU-Scientific Research Foundation and Turkish Scientific and Technical Research Council.

Authors' details

¹Faculty of Science, Hacettepe University, Department of Biology, Ecology Section, Beytepe-Ankara-Turkey. ²Unité des Virus Emergents, Marseille Université, UMR190 "Emergence des Pathologies Virales, Faculté de Médecine, Marseille, France. ³Parasitology Department, Charles University, Faculty of Science, Prague, Czech Republic. ⁴Department of Medical Microbiology, Hacettepe University, Faculty of Medicine, Virology Unit, Sıhhiye-Ankara-Turkey. ⁵Department of Communication Sciences, Hacettepe University, Faculty of Communication, Beytepe-Ankara-Turkey. ⁶IRD (IRD 224-CNRS 5290-UM1-UM2), MIVEGEC, Montpellier, France. ⁷Department of Virology, Ankara University, Faculty of Veterinary Medicine, Diskapi-Ankara-Turkey. ⁸Parasitology Department, Ege University, Faculty of Medicine, Bornova, Izmir, Turkey.

Published: 1 April 2014

doi:10.1186/1756-3305-7-S1-O21

Cite this article as: Kasap Erisoz et al.: Phlebotomine sand flies on the crossroads of Anatolia: transmitted diseases and vectors. *Parasites & Vectors* 2014 **7**(Suppl 1):O21.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit



* Correspondence: kaynas@hacettepe.edu.tr

¹Faculty of Science, Hacettepe University, Department of Biology, Ecology Section, Beytepe-Ankara-Turkey

Full list of author information is available at the end of the article