

MediLabSecure (WP3) – Newsletter n°31 – March 2022



NEWS FROM MLS.ENTOMO

Dear network members,

We look forward to receiving the results of our exercise on mosquito genera/species identification from our colleagues from the Euro-Med area. Please send them to us before 10 March 2022. Do not worry, the Sahel will not be forgotten as we plan to launch the same exercise with mosquitoes from the Sahelian region on 25 March.

Also for the attention of colleagues from the Euro-Med area, please note in your calendars that we are organizing a Webinar devoted (1) mainly to explain and comment the results of the exercise above-mentioned and (2) to update the hot topics on vector-borne diseases, on 23 and 24 of March from 2 to 4 pm. We will send you the program and the link to register via email.

NEWS FROM THE REST OF THE 'MED ENTOMOL' WORLD

[MOOC Water-borne infectious diseases](#)

This two months-long free MOOC, would make you able to:

- Identify the public health issues related to freshwater, especially in developing countries.
- Describe the main bacteriological, viral and parasitic diseases transmitted by ingestion or contact with fresh water.
- Elaborate preventive and corrective measures to reduce the risk of transmission of infectious diseases through water.

ENJOY READING

[The tiger mosquito in Lebanon two decades after its introduction: a growing health concern](#)

Nabil Haddad, Hayssam Omran, Fadila Amraoui, Renée Zakhia, Laurence Mousson, Anna-Bella Failloux
Aedes albopictus, was first observed in Lebanon in 2002. Previous studies revealed that the introduced mosquito was able to transmit chikungunya and dengue viruses under experimental conditions. In this study, the authors showed that *Ae. albopictus* is widespread in the humid and sub-humid regions of Mount Lebanon chain and is active from spring through late autumn. The authors experimentally demonstrated the ability of this mosquito to transmit Zika virus, a virus that is highly likely to be introduced to Lebanon due to important population flow from South America to the country during the summer season. Finally, the authors found that local populations of tiger mosquito were susceptible to insecticides of the pyrethroids and carbamates groups but resistant to those of the

organochlorines and organophosphates groups. The generated information should help national health authorities to establish targeted surveillance and control strategies for this mosquito.



Crédit photo: Nil Rahola/IRD

[Several Tick-Borne Pathogenic Viruses in Circulation in Anatolia, Turkey](#)

Ender Dinçer, Mehmet Özkan Timurkan, Bekir Oguz, Ismail Şahindokuyucu, Adem Şahan, Mustafa Ekinci, Ceylan Polat, Koray Ergünay

During 2020-2021, ticks removed from cattle, sheep, dogs, and cats in 11 provinces in 5 geographically distinct regions of Anatolia were identified, pooled, and screened using pan-nairovirus, pan-flavivirus and individual assays for Jingtun tick virus (JMTV), and Tacheng tick virus 1 and 2 (TcTV-1 and TcTV-2). A total of 901 tick specimens, comprising 6 species were included. *Rhipicephalus sanguineus* complex was the most abundant species (44.1%), followed by *Rhipicephalus bursa* (38.3%), *Haemaphysalis parva* (7.2%), and others. The specimens were screened in 158 pools with 12 pools (7.6%) being positive. Crimean-Congo hemorrhagic fever virus (CCHFV) lineage Europe 2 (genotype VI) sequences were detected in *R. bursa* in five (3.2%) of the pools, with similar prevalences in central and Mediterranean Anatolian provinces. JMTV was identified in four *R. bursa* and one *Rhipicephalus turanicus* pools, collected from Mediterranean and southeastern Anatolia, with a CCHFV and JMTV coinfecting *R. bursa* pool. The JMTV segment 1 sequences formed a separate cluster with those from Turkey and the Balkan peninsula in the maximum likelihood analysis. TcTV-2 was detected in two *Dermacentor marginatus* specimens (1.3%) collected in central Anatolia, with nucleocapsid sequences forming a phylogenetically segregated group among viruses from humans and ticks from China and Kazakhstan. CCHFV Europe 2 was initially documented in ticks from central Anatolian locations, where related orthonairoviruses had been previously recorded. Ongoing activity and a wider distribution of JMTV and TcTV-2 were observed. These viruses should be screened as potential etiological agents in human infections associated with tick bites.

If needed, we may help to get the full pdf of these articles.

If you have any suggestions or information you wish to share, please let us know and send an email to the discussion mls.entomo-all@listes.ird.fr

Best regards,

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MediLabSecure project

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All the previous entomo newsletters are available on the [MediLabSecure website](#).