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ZBORNIK SAŽETAKA

BOOK OF ABSTRACTS

FIRST DETECTION OF ARBOVIRUSES IN MOSQUITOES IN CROATIA

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During the last decade, autochthonous mosquito-borne arboviral diseases such as dengue fever (DENV), West Nile (WNV) and Usutu (USUV) neuroinvasive infection were detected in Croatia. Imported dengue, chikungunya (CHIKV) and Zika virus (ZIKV) infections were sporadically reported in travelers. So far, 52 mosquito species were detected in Croatia, several species of which are potential vectors for arboviruses. Asian tiger mosquito, *Aedes albopictus* is an invasive mosquito species established in the coastal areas, on the islands and in some regions of the continental Croatia. The species is a potential vector for DENV and CHIKV as well as ZIKV. The natural cycle of WNV and USUV include birds (reservoirs) and mosquitoes (vectors). *Culex pipiens* complex is the main vector for both viruses. In the period from 2015 to 2017, adult mosquitoes were collected in northwestern Croatia and tested for the presence of arboviruses. USUV RNA was detected in one of the 80 tested *Ae. albopictus* pools (2,459 mosquitoes) from the City area of Zagreb and one of the 25 tested *Culex pipiens* complex pools (648 mosquitoes) from the area of Međimurje County. No one pool of *Aedes vexans* and *Ochlerotatus sticticus* mosquitoes was positive for WNV, USUV or Tahyna virus RNA.

Keywords: mosquitoes, arboviruses, Croatia