

Article

<https://doi.org/10.61900/SPJVS.2023.04.03>

IN VIVO AND IN VITRO MODELS TO STUDY THE MOSQUITO-BORNE USUTU VIRUS

Serban MOROSAN^{1,2*}, Andreea COZMA³, Anca DASCALU³, Luciana CRIVEI³

Department of Public Health, Iasi University of Life Sciences, Romania¹

Department of Exact Sciences, Iasi University of Life Sciences, Romania³

UMS28, Sorbonne Université/INSERM, Paris, France²

Regional Center of Advanced Research for Emerging Diseases, Zoonoses and Food Safety (ROVETEMERG), Iasi
University of Life Sciences, Romania³

*E-mail: serban.morosan@uaiasi.ro

Abstract

Usutu virus (USUV), a mosquito-borne zoonotic flavivirus discovered in South Africa in 1959, has spread to many European countries over the last 20 years. The virus is currently a major concern for animal health due to its expanding host range and the growing number of avian mass mortality events. Although human infections with USUV are often asymptomatic, they are occasionally accompanied by neurological complications reminiscent of those due to West Nile virus (another flavivirus closely related to USUV). The knowledge about the various study models is a helpful tools for scientific to identify the best methos for different scientific questions.

Keywords: virus, zoonotic, in vitro and in vivo models
