CHARACTERIZATION OF INFECTION WITH SINDIBIS AND DENGUE VIRUSES IN FIELD POPULATIONS OF *AEDES AEGYPTI*: EPIDEMIOLOGICAL CONSIDERATIONS *VERSUS* MOLECULAR PERSPECTIVES

Melgaço, J G[1], Amaral, R J V[1], Borba, V F[1], Dansa-Petretski, M[1], Oliveira, T S[1]

[1]LQFPP, CBB, UENF Campos dos Goytacazes, RJ, Brazil

Arbovirus (arthropod-borne virus) causes important diseases in whole world. However, several aspects of Arbovirus-vector interaction are poorly known. One of these aspects is the ability to escape from antiviral cell defense system, making possible a persistent infection and transmission of the virus. The aim of this study is to map the infective capacity of natural populations of *Aedes aegypti* from north of the Rio de Janeiro State, using dengue and Sindbis viruses. Initially, mosquitoes from Campos dos Goytacazes and São Fidelis cities were used, kept in laboratory colonies for 3 generations. Artificial infections were carried out using DENV-2 (Jamaica 1409) and SINDBV (MRE-16). The infections *per os* were monitored in the 7th (DENV2) and 4th days (SINDBV) after feeding, by IFA, using monoclonal antibodies anti-Sindbis (30.11a) and anticomplex Flavivirus (4G2) (CDC – Fort Collins, USA). 74% individuals from "Horto" population showed positive reaction for dengue, while "Novo Mundo" population 35%, and Rockfeller only 15%. Sindbis infection showed the same pattern, but in "Novo Mundo" mosquitoes no positive individuals for SINDV infections was observed on these experimental conditions. The data can help to explain the epidemiological pattern of dengue in that region and to supply information helping to understand the susceptibility mechanisms.

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