

The purpose of these studies was to provide a baseline information on the Rift Valley fever (RVF) seroprevalences among domestic ruminants and African buffaloes in Mozambique, which were found to be high. RVF phlebovirus (RVFPV) mosquito vectors (*Culex*, *Anopheles*, *Mansonia*, *Aedes* genera) were identified in south Mozambique. Furthermore, RVFPV was detected in *Culex* mosquitoes. The efficacy of the formalin-inactivated RVF vaccine used for cattle was assessed. RVFPV antigens were expressed in *Arabidopsis thaliana* plants and induced strong immune response in mice.

Belisário Moiane received his doctoral education at the Department of Biomedical Sciences and Veterinary Public Health, Swedish University of Agricultural Sciences (SLU), and a licentiate degree from the Department of Microbiology Tumor and Cell Biology, Karolinska Institute (KI), Sweden. He obtained his veterinary degree from the Veterinary Faculty of Eduardo Mondlane University in Mozambique.

Acta Universitatis Agriculturae Sueciae presents doctoral theses from Swedish University of Agricultural Sciences (SLU).

SLU generates knowledge for sustainable use of biological natural resources. Research, education, extension, as well as environmental monitoring and assessment are used to achieve this goal.

Online publication of thesis summary: <http://pub.epsilon.slu.se>

ISSN 1652-6880

ISBN (print version) 978-91-7760-058-9

ISBN (electronic version) 978-91-7760-059-6