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.

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