

ABSTRACT

Tissue culture rinderpest vaccine (TCRV) virus interfered with the replication of the viruses of bovine virus diarrhoea (BVD), infectious bovine rhinotracheitis (IBR), bovine parainfluenza type 3 (PI-3) and foot-and-mouth disease (FMD) Asia type 1 in bovine kidney cell cultures. The interference induced by TCRV was mediated by a substance that fulfilled the biological criteria of interferon. The results also indicated that interferon-mediated-auto-interference limits the development and progress of rinderpest virus cytopathogenic effect (CPE) in tissue culture. This may explain why complete change of medium from TCRV virus infected cultures accelerates the extension of the CPE and the release of the virus into the culture fluid. It is suggested that the interferon system may play an important role in the pathogenesis of rinderpest