Abstract

This study has been based on preparation and evaluation of new Foot and Mouth Disease oil vaccine by using two different adjuvants which are Montanide ISA 206 and Nigella sativa oil and compared with Al(OH)_3 gel vaccine and tested in sheep. The end results revealed that the duration and efficacy of immunity was shorter for FMD vaccine with Al(OH)_3 gel than all adjuvants. Also, results of serological tests (Enzyme linked immunosorbent assay "ELISA" and serum neutralization test "SNT") indicate that vaccine emulsified with Montanide ISA 206 gave best protection capability with long lasting immune response (up to 28 weeks) in sheep if compared with the other adjuvants Nigella sativa which gave immunity up to 26 weeks while it gave only up to 18 weeks with the Al(OH)_3 adjuvant that used in local vaccine.