

# Field and Experimental Investigations of an Outbreak of African Swine Fever in Nigeria

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## ABSTRACT

An outbreak of African Swine Fever (ASF), characterized by a mortality of 50 to 100% in various herds, was diagnosed among free-ranging domesticated pigs in Delta State, Nigeria, in August 1998. The etiologies confirmation of ASF was made by virus isolation, PCR and sequencing of a 280 base pair fragment of the major capsid protein (VP72) gene. Experimental infection of pig with infected blood resulted in pyrexia which peaked two to four days postinfection, followed by death in five to six days postinfection. Postmortem examination revealed widespread hemorrhage, congestion and edema of tissues. The lymph nodes, spleen, liver and kidney showed marked focal random necrosis and loss of lymphocyte from the splenic end lymphoid follicle. There was an acute orchitis with massive neutrophilic and macrophage infiltrates into the intertubular connective tissues. Meningitis and local hemorrhage were observed in the brain and spinal cord. The outbreak was believed to be a continuation of an eastward spread of ASF from neighboring Benin, which began the previous year (1997).

## Keyword

Swine - African swine fever- Epidemic; - Delta State-Nigeria.