



## CLASSICAL SWINE FEVER CASES IN NORTH KERALA DURING THE PERIOD FROM 2006 2010

Chintu Ravishankar<sup>1</sup>, Jini George<sup>2</sup> and Koshy John<sup>3</sup>

Department of Veterinary Microbiology  
College of Veterinary and Animal Sciences, Pookot Lakkidi P.O., Wayanad, Kerala

Classical Swine Fever (CSF) is a highly contagious viral disease of swine which can run an acute, sub acute, chronic, atypical or inapparent course. In Kerala, the disease was first reported in pigs from Muttill in Wayanad district of North Kerala in 2006 (Ravishankar *et al.*, 2007). It is caused by CSF virus, a member of the genus *Pestivirus*, family *Flaviviridae*, and is closely related antigenically and structurally to bovine viral diarrhoea virus and border disease virus.

After the first report of the disease in the state, there have been further outbreaks/cases of the disease in many parts of North Kerala. This communication deals with the summary of data on the occurrence of CSF in North Kerala during the period from March 2006 to August 2010 compiled on the basis of the results of tests conducted on CSF suspected samples received in the Department of Veterinary Microbiology during the period.

A total of 50 samples (whole blood/spleen/mesenteric lymph node/intestine) from CSF suspected cases were received in the department for diagnosis. The samples were subjected to reverse transcription polymerase chain reaction\* (RT-PCR) for detection of viral nucleic acid and/or antigen capture ELISA for detection of CSF virions. The year wise split up of the samples and the results are given in table 1.

Table 1. Year wise split up the samples received and the results

Year	Number of samples received	Number positive
2006	7	3 (42.85%)
2007	13	1 (7.96%)
2008	10	0
2009	17	5 (29.41%)
2010	3	0
<b>Total</b>	<b>50</b>	<b>9 (18%)</b>

Out of the 50 samples tested during the period, nine (18 per cent) were positive for CSF. Of the nine samples, 7 were positive by RT-PCR; five by ELISA and three by both the tests.

(\*For samples received from March 2006 to May 2009; RT-PCR was done at Indian Veterinary Research Institute, Izatnagar. Samples received from June 2009 were screened by RT-PCR at Department of Veterinary Microbiology, College of Veterinary and Animal Sciences, Pookot).

### REFERENCES

Ravishankar, C., Priya, P. M., Mini, M., Rameshkumar, P., Senthamil Selvan, P., Jayesh, V., Sunil, K. S., Sharmadha, M. K., Sreekumaran, T. and Jayaprakasan, V. 2007. **First confirmed occurrence of classical swine fever in Kerala state, India.** *J. Swine Health Prod.* 15(3):156159

<sup>1</sup>Assistant Professor, <sup>2</sup>Teaching Assistant, <sup>3</sup>Associate Professor and Head  
Department of Veterinary Microbiology,  
College of Veterinary and Animal Sciences, Pookot