



**Tilapia lake virus disease,
Malaysia**

Information received on 25/09/2017 from Dr Quaza Nizamuddin Bin Hassan Nizam, Deputy Director General (Veterinary Health), Department of veterinary services, Division of livestock resources & technology development, Putrajaya, Malaysia

Summary

Report type	Immediate notification
Date of start of the event	19/06/2017
Date of confirmation of the event	27/07/2017
Report date	25/09/2017
Date submitted to OIE	25/09/2017
Date event resolved	30/10/2017
Reason for notification	Emerging disease
Morbidity	5.3 %
Mortality	5.3 %
Zoonotic impact	No
Causal agent	Orthomyxo-like virus
Related reports	Immediate notification (25/09/2017) Follow-up report No. 1 (02/05/2018) Follow-up report No. 2 (04/06/2018)

New outbreaks (2)

Outbreak 1 (TiLV_Perlis)	Timah Tasoh dam, Timah Tasoh, Kangar, Perlis							
Date of start of the outbreak	19/06/2017							
Outbreak status	Resolved (07/08/2017)							
Epidemiological unit	Lake							
Water type	Fresh water							
Population type	Wild							
Production system	Open							
Affected animals	Species	Morbidity	Mortality	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered
	Black Tilapia (<i>Oreochromis</i> spp)	0.71 %	0.71 %	42000	300	300	0	0
Affected population	The affected population is wild tilapia. Total number of wild tilapia in the dam is unknown. A total of 300 tilapias died prior to investigation. Dead fish were disposed accordingly. No other mortalities or moribund fish were observed after the end date.							

Outbreak 2 (TiLV_Kedah)	Pial River, Merbok, Kuala Muda, Kedah							
Date of start of the outbreak	04/07/2017							
Outbreak status	Resolved (27/07/2017)							
Epidemiological unit	Pond							
Water type	Fresh water							
Population type	Farmed							

Production system	Semi-open							
Affected animals	Species	Morbidity	Mortality	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered
	Hybrid Red Tilapia (<i>Oreochromis</i> spp)	15 %	15 %	20000	3000	3000	0	17000
Affected population	The affected population is farmed tilapia. Dead fish were then disposed accordingly. Other susceptible fish in the same unit were then harvested for consumption.							

Summary of outbreaks	Total outbreaks: 2					
Total animals affected	Species	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered
	Black Tilapia (<i>Oreochromis</i> spp)	42000	300	300	0	0
	Hybrid Red Tilapia (<i>Oreochromis</i> spp)	20000	3000	3000	0	17000
Outbreak statistics	Species	Apparent morbidity rate	Apparent mortality rate	Apparent case fatality rate	Proportion susceptible animals lost*	
	Black Tilapia (<i>Oreochromis</i> spp)	0.71%	0.71%	100.00%	0.71%	
	Hybrid Red Tilapia (<i>Oreochromis</i> spp)	15.00%	15.00%	100.00%	100.00%	

*Removed from the susceptible population through death, destruction and/or slaughter

Epidemiology

Source of the outbreak(s) or origin of infection	<ul style="list-style-type: none"> Unknown or inconclusive
Epidemiological comments	The competent authority (CA) was notified of the disease due to unexplained mortalities of tilapia in the reported zones. The CA then investigated the mortality, restricted movement of fish in the area and collected samples. All the samples were tested using conventional PCR. The CA has supervised the proper disposal of fish carcasses and farm disinfection. The remaining fish were harvested and farmer was advised to do the break cycle for one month. The monitoring activity was continued and no more tilapia mortality was reported.

Control measures

Measures applied	<ul style="list-style-type: none"> Vaccination permitted (if a vaccine exists) No treatment of affected animals
Measures to be applied	<ul style="list-style-type: none"> No other measures

Diagnostic test results

Laboratory name and type	Species	Test	Test date	Result
National Fish Health Research Division (NaFisH) (National laboratory)	Black Tilapia (<i>Oreochromis</i> spp)	polymerase chain reaction (PCR)	27/07/2017	Positive
National Fish Health Research Division (NaFisH) (National laboratory)	Hybrid Red Tilapia (<i>Oreochromis</i> spp)	polymerase chain reaction (PCR)	27/07/2017	Positive

Future Reporting

The event is continuing. Weekly follow-up reports will be submitted.

Map of outbreak locations

