



Food and Agriculture
Organization of the
United Nations



FAO/China Intensive Training Course on Tilapia Lake Virus (TiLV)

Sun Yat Sen University, Guangzhou, China

18-24 June 2018

Opening Session

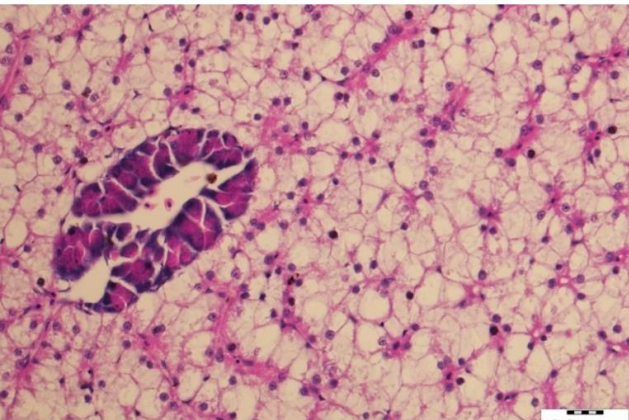
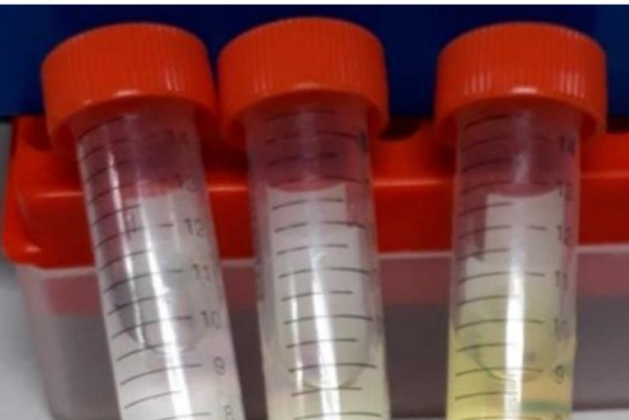
4 P's and Training Course Mechanics

Melba.Reantaso@fao.org



Outline: 4 Ps

Purpose (objectives): why
Process: how
Participation: who
Products (outcomes): what



Purpose (objectives): why

- to build TiLV capacity of trainees from selected countries
- through enhancing their knowledge on TiLV diagnostics (field and laboratory), surveillance, control and management, emergency preparedness and contingency plan within the context of tilapia aquaculture and development of action plans on TiLV
- gain new knowledge on TiLV
- contribute to finding solutions to dealing with TiLV

Process (how)

- Duration: 7 days: 18-24 June
- Seven sessions: lectures and practical work (field /laboratory, interactive working group activities), prepare National Action Plans on TiLV, presentations, written exam and course evaluation (USB)
- Each module will have a learning objective, learning outcome, duration, activity, supporting documents, reference (USB)
- Laboratories of Sun Yat-Sen University
- Field trip to a hatchery
- Interactive learning and mentoring process; sharing and exchange of knowledge and experience
- SYSU: China-ASEAN Center for Joint Research and Promotion of Marine Aquaculture Technology: provided travel funds and local logistics; Chinese experts
- Norwegian Veterinary Institute: 1 expert; SENASICA: 1 trainee
- FAO: technical oversight and experts; participant from Mozambique (FAO-Mozambique)

Day 1 (Mon): 18 June 2018

Time	Activity	Time	Activity
08:00-08:30	Transfer from hotel to SYSU	12:00-13:00	Lunch break
08:30-08:50	OPENING Session Opening/Welcome Remarks from SYSU and FAO	13:00-13:30	Session 2: What is currently known about TiLV
08:50-09:10	Self-introduction	13:30-14:00	Emerging, re-emerging and new diseases of tilapia (HT Dong)
09:10-09:15	4 P's Training course mechanics (M Reantaso, FAO)	14:00-14:30	TiLV, the discovery of a new pathogen (MD Jansen)
09:15-09:30	Group photo	14:30-15:00	
09:30-10:00	Session 1: Tilapia farming	15:00-15:15	Coffee break
10:00-10:15	Tilapia biology and culture status worldwide (J Xia)	15:15-15:30	Biology, epidemiology and economics of TiLV (MD Jansen)
10:15-10:30	Coffee break	15:30-16:00	
10:30-11:00	Research & application of tilapia industry technologies in China (H Yang)	16:00-16:30	
11:00-11:15	The control strategy of cultured tilapia diseases in China (A Li)	16:30-17:00	Q & A and wrap-up
11:15-11:30		17:00-17:30	Transfer from SYSU to hotel
11:30-12:00			

Day 2 (Tues): 19 June 2018

Time	Activity	Time	Activity	
08:00-08:30	Transfer from hotel to SYSU	12:00-13:00	Lunch	
08:30-09:00	SESSION 2: What is currently known about TiLV	13:00-13:30	Fish necropsy and sample collection for TiLV diagnosis (HT Dong)	
09:00-09:30		13:30-14:00		
09:00-09:30		TiLV pathology (MD Jansen)	14:00-14:30	TiLV isolation and Koch's postulate (W Surachetpong and K Tang-Nelson)
09:30-10:00			14:30-15:00	
10:00-10:15			15:00-15:15	Coffee break
10:15-10:30	Coffee break	15:00-15:30	<i>In situ</i> hybridization for TiLV (HT Dong and K Tang-Nelson)	
10:30-11:00	TiLV diagnostics (W Surachetpong)	15:30-16:00		
11:00-11:30		16:00-16:30		
11:30-12:00	Fish necropsy and sample collection for TiLV diagnosis (HT Dong)	16:30-17:00	Q & A and wrap-up	
		17:00-17:30	Transfer from hotel to SYSU	

Day 3 (Wed): 20 June 2018

Time	Activity	Time	Activity
08:00-08:30	Transfer from hotel to SYSU	12:00-13:00	Lunch
08:30-09:00	SESSION 3: Field work	13:00-13:30	Field work
09:00-09:00	Checklist of materials	13:30-14:00	
09:00-09:30	Farm data	14:00-14:30	
09:30-10:00	Water quality	14:30-15:00	
09:30-10:00	Examination of clinical signs	14:30-15:00	
10:00-10:15	Tissue sampling	15:00-15:15	Coffee break
10:00-10:15	Record keeping		
10:15-10:30	Coffee break	15:00-15:30	Field work
10:30-11:00	Field work	15:30-16:00	
11:00-11:30		16:00-16:30	
11:30-12:00		16:30-17:00	Q & A and wrap-up
		17:00-17:30	Transfer from hotel to SYSU

Day 4 (Thurs): 21 June 2018

Time	Activity	Time	Activity
08:00-08:30	Transfer from hotel to SYSU	12:00-13:00	Lunch
08:30-09:00	SESSION 4 Applied veterinary epidemiology to design and implement surveillance programs: Development of TiLVD active surveillance Principles of epidemiology and surveillance and their application to aquaculture (F Mardones/MD Jansen)	13:00-13:30	Introduction to surveillance (F Mardones/MD Jansen)
09:00-09:00		13:30-14:00	
09:00-09:30		14:00-14:30	
09:30-10:00		14:30-15:00	
10:00-10:15		(F Mardones/MD Jansen)	15:00-15:15
10:15-10:30	Coffee break	15:00-15:45	Design and implementation of an active TiLV surveillance plan (12-point checklist) (F Mardones/MD Jansen/M Reantaso)
10:30-11:00	Principles of epidemiology and surveillance and their application to aquaculture (F Mardones/MD Jansen)	15:45-16:00	Analysis of surveillance data (F Mardones/MD Jansen)
11:00-11:30		16:00-16:30	
11:30-12:00		16:30-17:00	Q & A and wrap-up
		17:00-17:30	Transfer from hotel to SYSU

Day 5 (Fri): 22 June 2018

Time	Activity	Time	Activity
08:00-08:30	Transfer from hotel to SYSU	12:00-13:00	Lunch
08:30-09:00	SESSION 4 continued	13:00-13:30	SESSION 2 continued
09:00-09:00	Applied veterinary epidemiology to design and implement surveillance programs: Development of TiLVD active surveillance	13:30-14:00	Histology/RT-PCR (HT Dong/W Surachetpong//K Tang-Nelson)
09:00-09:30		14:00-14:30	
09:30-10:00		14:30-15:00	
10:00-10:15		15:00-15:15	Coffee break
10:15-10:30	Coffee break	15:00-15:30	Histology/RT-PCR (HT Dong/W Surachetpong//K Tang-Nelson)
10:30-11:00	Implementation of an active TiLV surveillance plan (F Mardones/MD Jansen/M Reantaso)	15:30-16:00	
11:00-11:30		16:00-16:30	Pond-site TiLV kit demo (K Tang-Nelson)
11:30-12:00		16:30-17:00	Q & A and wrap-up
		17:00-17:30	Transfer from hotel to SYSU

Day 6 (Sat): 23 June 2018

Time	Activity	Time	Activity
08:00-08:30	Transfer from hotel to SYSU	12:00-13:00	Lunch
08:30-09:00	SESSION 5: TiLV control Implementation of restrictions in international trade (W Surachetpong)	13:00-13:30	SESSION 6 Emergency preparedness and contingency plan Principles of emergency preparedness and contingency plans (M Reantaso)
09:00-09:00		13:30-14:00	Emergency preparedness and response system (EPRS) audit (M Reantaso)
09:00-09:30		14:00-14:30	
09:30-10:00	Farm-level biosecurity: TiLVD prevention and management (W Surachetpong)	14:30-15:00	TiLV disease strategy manual (part of contingency plan) (K Tang-Nelson)
10:00-10:15		15:00-15:15	Coffee break
10:15-10:30	Coffee break	15:00-15:30	TiLV disease strategy manual (part of contingency plan) (K Tang-Nelson)
10:30-10:45	Farm-level biosecurity: TiLVD prevention and management (W Surachetpong)	15:30-16:00	
10:45-11:00	Import and export quarantine of aquatic animals and its products (H Liu)	16:00-16:30	Emergency preparedness simulation exercise (F Mardones/MD Jansen/M Reantaso)
11:30-12:00		16:30-17:00	
		17:00-17:30	Transfer from hotel to SYSU

Day 7 (Sun): 24 June 2018

Time	Activity	Time	Activity
08:00-08:30	Transfer from hotel to SYSU	12:00-13:00	Lunch
08:30-09:00	Emergency preparedness simulation exercise Disease outbreak investigation (F Mardones/MD Jansen)	13:00-13:30	Presentation of national action plan on TiLV (M Reantaso/All trainees/trainors)
09:00-09:00		13:30-14:00	
09:00-09:30		14:00-14:30	
09:30-10:00		14:30-15:00	
10:00-10:15		15:00-15:15	Coffee break
10:15-10:30	Coffee break	15:00-15:30	Written exam (K Tang-Nelson, All trainees)
10:30-11:00	SESSION 7 Development of national country action plan on TiLV (application of what has been learned during the training course) Preparation of national action plan on TiLV (M Reantaso/All trainees/trainors)	15:30-16:00	Review of written exam (All trainees/trainors)
11:00-11:30		16:00-16:30	Training course evaluation (M Reantaso)
11:30-12:00		16:30-17:00	CLOSING Session
		17:00-17:30	Closing remarks and Awarding of certificates <ul style="list-style-type: none"> • Mr. Feng Zhang, Deputy Director of NFTEC • Ms Qing Li, NFTEC • FAO China (TBA)
		17:30-18:00	Transfer from hotel to SYSU

Participation (who)

- 20 selected trainees (10 countries) who met the criteria based on Call for Expression of Interest (2 May 2018)
 - basic (practical and laboratory) knowledge on aquatic animal health and aquaculture
 - with responsibility for aquaculture biosecurity
 - ability to implement post-training activities in their respective institutions
 - fluency in spoken and written English
 - timely application
- 9 Chinese
- Trainers: China and experts from Chile, Norway, Thailand, USA, Viet Nam, FAO
- Trainees: own specific expertise and experience (Brasil, China, Indonesia, Italy, Mozambique, Peru, Philippines, Sri Lanka, Viet Nam) as competent authority, educators (academe), producer and service providers



Dr Mona Jansen
(Norway)



Dr Yan Liang
(China)



Dr Hong Liu
(China)



Dr Kathy Tang-
Nelson (USA)



Dr Melba Reantaso
FAO Italy



Dr Nguyen Ha
Dong (Viet Nam)



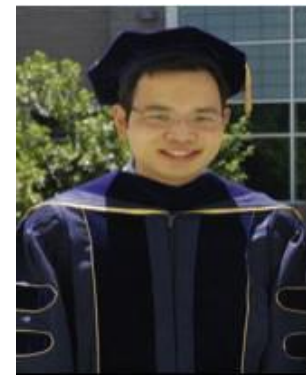
Dr Yang Hong
(China)



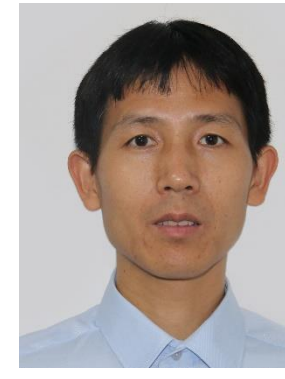
Prof Anxing Li
(China)



Dr Fernando
Mardones
(Chile)



Dr Win
Surachetpong
(Thailand)



Prof.
JunHong
Xia



Dr Zheng
Sun Yat Sen
University

FAO/China Intensive Training Course on Tilapia Lake Virus (TiLV) Sun Yat Sen University, Guangzhou, China, 18-24 June 2018



Products (outcomes): what

The expected outcomes of the course are below:

- Enhanced knowledge on all aspects of TiLV based on available information and experience
- Action plan on TiLV prepared by trainees
- Possibility to participate in the FAO International Technical Seminar on TiLV to be held in 2019 to present the outcomes of the work done on TiLV at country level
 - Currently in discussions with Israel (possible venue)
- Networking
- Database