

A National Action Plan on TiLV in China

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Outline

1. Farmed and wild population of tilapia
2. Diagnostics
3. Surveillance: design and implementation
4. Emergency preparedness
5. TilV management and control



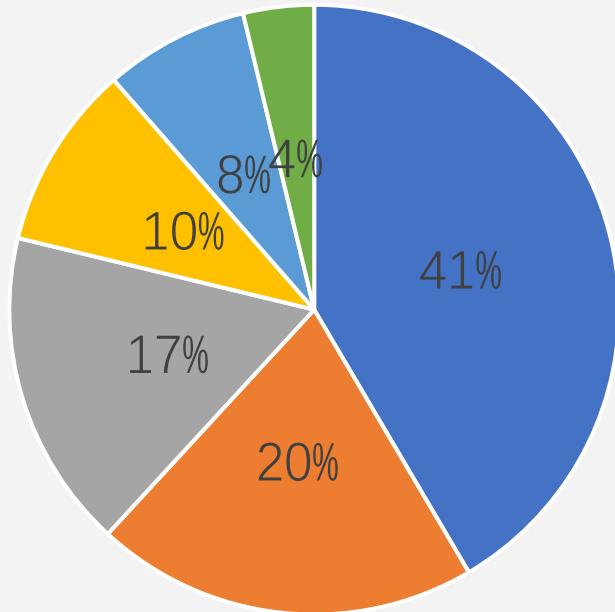
1. Farmed and wild population of tilapia

- ◆ Tilapia production : about 1.8 million tons in 2016. China has no catch wild tilapia records.
- ◆ Tilapia exports : about 520,000 tons in 2016
- ◆ Farm registry



1. Farmed and wild population of tilapia

◆ Main breeding areas :



■ Guangdong
■ Yunnan

■ Hainan
■ Fujian

■ Guangxi
■ other provinces



2. Diagnostics

- Diagnostic laboratories and competence
 - Molecular detection methods : RT-PCR , RT-qPCR
 - Electron microscopy
 - Cell culture
 - In situ hybridization
 - Histopathological observation
- Confirming of new emerging disease is based on Koch's Postulate
- Diagnostics tests





3 Surveillance

- ◆ Surveillance purpose : to confirm present status and to secure early detection of TiLV
- ◆ Populations : tilapia in farm (fingerlings and young adults)
- ◆ Clustering of diseases : every month for juvenile and young adults
- ◆ Case definition: clinical, laboratory and epidemiological

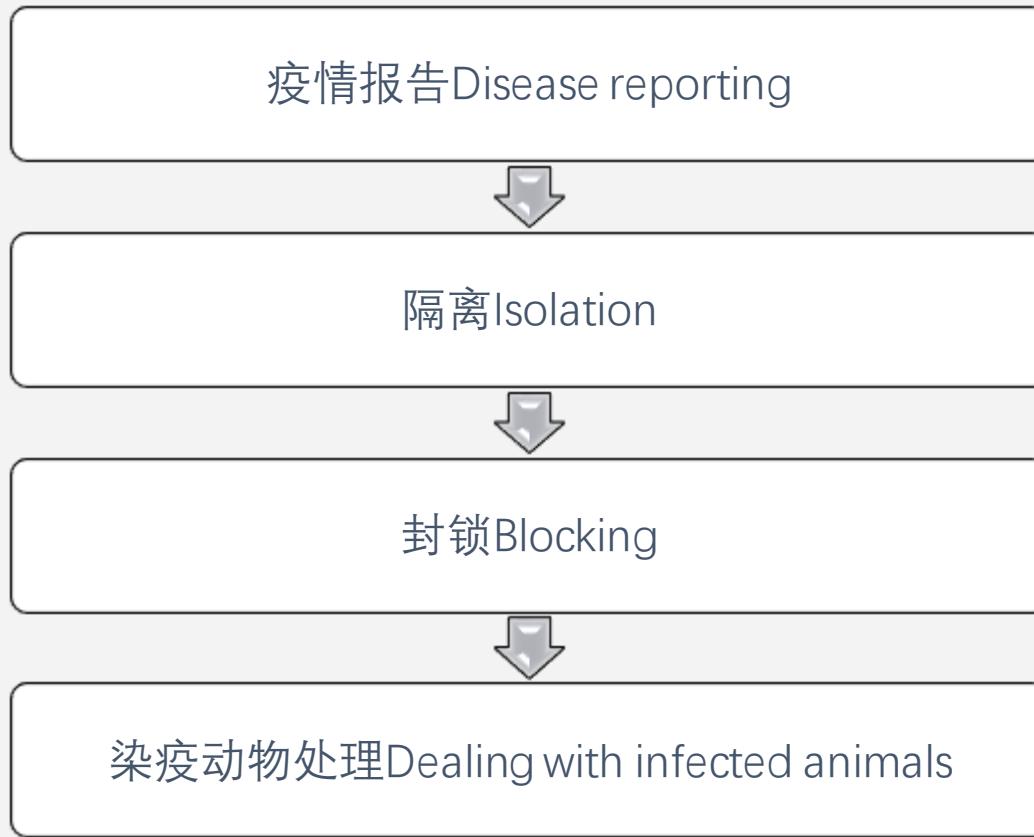


3 Surveillance

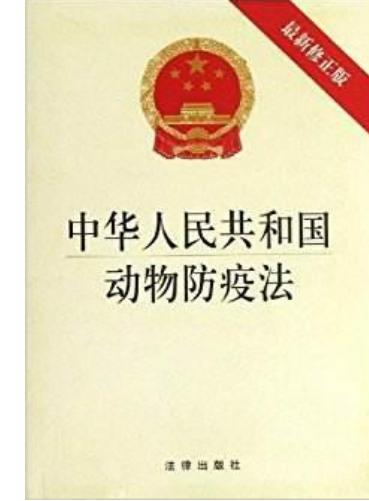
- ◆ Sampling : regular tilapia sampling at the monitoring sites during the whole year
- ◆ Disease detection : carrying out TiLV , *Streptococcus* detection of the collecting samples
- ◆ Data analysis : data analysis and risk assessment according to the test results of the detection



4 Emergency preparedness



Report content



- Time and place;
- Kinds and quantity of infected animals, immunized situation, number of deaths, clinical symptoms, pathology and diagnosis
- Epidemiological situation;
- Control measures already put in place;
- Responsibility epidemic reporting unit and contact information .



4 Emergency preparedness

Reporting procedures





4 Emergency preparedness

■ Isolation

- Separating infected farms or suspected infected farms from healthy farms, and taking necessary measures to cut off the transmission, to prevent the spread of the disease.



4 Emergency preparedness

■ Blocking

- To cut off the transmission after the outbreak of disease, ban people and animals from the epidemic area and its surrounding area



4 Emergency preparedness

■ Division of blocking areas

- Epidemic spot: Areas of infected animals
- Epidemic area: Areas with radius of 3 km centered on epidemic spot
- Risk area: Areas with radius of 3-5 km around epidemic area



4 Emergency preparedness

■ Dealing with infected animals

- Culling of infected animals
- Treatment of infected carcasses

Burned

High temperature treatment

Buried deep

Fermentation

Disinfection by chemical treatment



5 TilV management and control

■ Farm-level biosecurity

- Ensure the fry/fingering quality
- Reinforce the management , periodic sterilization of tools
- Maintain a reasonable stocking density
- Mixed culture and rotated culture with other species
- Timely remove the sick and dead fish
- harmless treatment of dead fish



5 TilV management and control

■ Movement of live tilapia

- Make sure the transport equipment is clean and pollution-free
- Strengthen quarantine on imports and exports
- Other aspects: vaccine development

Thanks for your attention !

