

## **Identification and characterization of marine pathogenic vibrios in cultured golden pompano (*Trachinotus ovatus*) in Guangxi, China**

### **Abstract**

The causative agent responsible for vibriosis in tropical fish aquaculture, *Vibrio harveyi*, has become a major bacterial pathogen. Studies suggest that this bacterium has developed resistance to antibiotics commonly used in aquaculture. In view of this situation and the requirement for the proposed postantibiotic era, bacteriophage therapy seems to be a promising control strategy for fish vibriosis. In this study, a lytic *Vibrio* phage VhKM4 belonging to a member of large, marine Myoviridae was successfully isolated. It exhibited bacteriolysis to both *V. harveyi* VHJR7 and *V. parahaemolyticus* ATCC 17802. The latent period of the VhKM4 phage was recorded at 60 min. It also recorded average burst size of approximately 52 plaque-forming units per infected cell. A strong bacteriolytic activity at low multiplicity of infection of 0.01 indicates the effectiveness of this large marine myovirid against fish pathogenic strain of *V. harveyi* VHJR7. Received June 16, 2016; accepted October 7, 2016.