

First report of methicillin-resistant *Staphylococcus aureus* from cage-cultured tilapia (*Oreochromis niloticus*)

ABSTRACT

Swabs from the brain, eyes and kidneys of tilapia from 11 farms were collected for a period of 2 years. They were grown on blood agar before cultures of suspected *Staphylococcus aureus* were subjected to ABI STAPH Detection Kit and PCR for identification. They were then grown on oxacillin resistance screening agar base (ORSAB) and subjected to PCR using the MRSA 17 kb forward and reverse primers to identify the methicillin-resistant *S. aureus* (MRSA). A total of 559 isolates of *Staphylococcus* spp. were obtained, from which 198 (35%) isolates were identified as *S. aureus*. Of the 198 *S. aureus* isolated from tilapias, 98 (50%) were identified as methicillin-resistant *S. aureus* (MRSA). Since global spread of multidrug-resistant bacteria has increased in the past decade, this new finding in fish should be of concern.

Keyword: Methicillin-resistant, *Staphylococcus*, *aureus* tilapia