

Antibiotic resistant *Salmonella* and *Vibrio* associated with farmed *Litopenaeus vannamei*.

ABSTRACT

Salmonella and *Vibrio* species were isolated and identified from *Litopenaeus vannamei* cultured in shrimp farms. Shrimp samples showed occurrence of 3.3% of *Salmonella* and 48.3% of *Vibrio*. The isolates were also screened for antibiotic resistance to oxolinic acid, sulphonamides, tetracycline, sulfamethoxazole/trimethoprim, norfloxacin, ampicillin, doxycycline hydrochloride, erythromycin, chloramphenicol, and nitrofurantoin. *Salmonella enterica* serovar Corvallis isolated from shrimp showed individual and multiple antibiotic resistance patterns. Five *Vibrio* species having individual and multiple antibiotic resistance were also identified. They were *Vibrio cholerae* (18.3%), *V. mimicus* (16.7%), *V. parahaemolyticus* (10%), *V. vulnificus* (6.7%), and *V. alginolyticus* (1.7%). Farm owners should be concerned about the presence of these pathogenic bacteria which also contributes to human health risk and should adopt best management practices for responsible aquaculture to ensure the quality of shrimp.

Keyword: *Vibrio*; *Salmonella*; *Litopenaeus vannamei*; Antibiotic resistant.