

Abstract:

The fishing industry is a productive sector with great expressiveness, creating jobs and improving income in the western region of Parana state, where about 800 families depend on fishing to survive. In cities bordering the lake of Itaipu, with the support of the Cultivating Good Water Program of Itaipu Binacional Dam, a project that adds value to native fish of low commercial value by mechanically separated meat (MSM) production was created. The commercialization of this product has provided significant increases in household income and the annual production has exceeded 12 tons. However, improper handling and processing of these products can lead to microbiological problems that make their commercialization unfeasible. One of the main investigated contaminants in fish products is the bacterium *Salmonella* sp., causative agent of serious foodborne illness. It is one of the leading causes in outbreaks in several countries and represents a significant public health problem. This study aimed to detect the presence of *Salmonella* sp. in MSM samples processed in fishing communities of the Itaipu Lake region. From September 2012 to December 2014, 187 samples of fish MSM were analyzed in the Environmental Laboratory of Itaipu Binacional Dam. The presence of *Salmonella* sp was investigated following the methodology of LANARA/IN62. The results showed that 5.3% of samples were positive for *Salmonella* sp, considered inappropriate for consumption, according to microbiological standards established by Brazilian Ministry of Health, resolution RDC No. 12 of January 2, 2001. Throughout the research, educational activities have been implemented, as the handling of the fish during processing, and was verified that the number of contaminated samples by *Salmonella* sp has decreased after corrective actions.