Contamination of Chloramphenicol, Oxytetracycline and Oxolinic acid in Natural Aquatic Animals Nearby Marine Shrimp Farms in Songkhla and Patthalung Provinces

Montira Thavornyutikarn*, Jiraporn Kasornchandra and Juliwan Roongkamnerdwongsa
Coastal Aquatic Animal Health Research Institute

Abstract

Monitoring on the contamination of chloramphenicol by Enzyme-Linked Immunosorbance Assay (ELISA) method, oxytetracycline and oxolinic acid by High performance Liquid Chromatography (HPLC) method in natural aquatic animals, 21 species with total 266 samples, from natural resources those located nearby marine shrimp farms in Songkhla and Pattalung provinces. Covering with 6 sub-districts responsibility area such as Singha-nakorn, Khon-neang, Hadyai, Jana, Taepa in Songkhla province and Pak-payoon in Pattalung Province from February 2004 – January 2005 shown that there were all small amounts contamination of drug residues. Chloramphenicol residues was not found over standard 0.3 ng/g. Oxytetracycline could be detected 0.4% which was over standard 0.1 µg/g. While the oxolinic acid was found 2.37% over the standard 0.02 µg/g. Results on the average of drugs residue in each group of aquatic animals was found frequency in crab more than fish and shrimp respectively. Only average of Oxolinic acid, which was found at Khon-neang, was over standard in raining season with $0.049 \pm 0.069 \mu g/g$.

Keywords: Chloramphenicol, Oxytetracycline, Oxolinic acid, Drug contamination, Marine shrimp

* Corresponding Author: 130/2 Moo. 8 Pawong, Muang, Songkhla 90100 Tel. 0-7433-4516-8
E-mail: montira_tha@yahoo.com