

ABSTRACT

STUDY OF HEAVY METAL CONCENTRATION OF CHROMIUM (Cr) AND MANGANESE (Mn) IN NATURAL WATERS FISH IN THE ESTUARY OF WAY KUALA RIVER BANDAR LAMPUNG

By

Clara Citra Resmie

Heavy metal concentrations of Mn and Cr were determine in natural waters fish kiper (*Scatophagus argus*) which lived in the estuary of Way Kuala river in Bandar Lampung. Determination of heavy metals was done by of Atomic Absorption Spectroscopy (AAS).

The result indicated concentrations of Mn in flesh, gills and viscera, are respectively $0.0082 \pm 1.045 \times 10^{-07}$ ppm, $0.0101 \pm 5.595 \times 10^{-06}$ ppm and $0.0195 \pm 6.555 \times 10^{-07}$ ppm. Dry weight Cr concentrations in the flesh, gills and viscera, are respectively $0.0057 \pm 8.944 \times 10^{-08}$ ppm, $0.0202 \pm 1.007 \times 10^{-05}$ ppm and $0.0389 \pm 1.303 \times 10^{-06}$ ppm. Mn concentrations in the water at the upstream, midstream and downstream estuary Way Kuala is 0.3499 ppm, 0.3513 ppm and 0.3513 ppm. Cr concentrations in the water at the upstream, midstream and downstream estuary Way Kuala is 0.0426 ppm, 0.0327 ppm and 0.0356 ppm.

Keywords: Fish, Mn, Cr, Kuala Sungai Way