Heavy Metals Study of Lead (Pb) in the White Shrimp (*Penaeus merguiensis*) and Scallop Blood (*Anadara granosa*) In Coastal Marine of Kenjeran Surabaya and Saronggi Sumenep Marine.

Merry Fransisca, Muhammad Arief, Ir., M.Kes. and Yudi Cahyoko, Ir., M.Si.

Fakultas Perikanan dan Kelautan Universitas Airlangga Kampus C Mulyorejo – Surabaya, 60115 Telp. 031-5911451

ABSTRACT

Kenjeran Surabaya waters have been contaminated by industrial effluent and domestic sewage carried by rivers such as Wonorejo and Wonokromo rivers that stackuo contaminate the waters (Arisandi, 2001). Saronggi Sumenep waters which borders the strait of Madura, there is also fishing activities and transportation, it is supported in the waters of the marine life that lives accumulating by heavy metals.

The purpose of this research are to know the difference between levels of lead that accumulates in the blood of white shrimp and mussels in the coastal waters of Kenjeran Surabaya and Saronggi Sumenep, and compared the levels of lead in blood of white shrimp and mussels with the provisions of the Indonesian National Standard (SNI). Sampling was conducted at two water stations with 3 points and then the samples were tested using AAS method (Atomic Absorption Spectrometry) analyzed data obtained using independent sample T 2 test.

The results showed that Pb levels in the white shrimp in the Kenjeran waters average of 2.55949 mg/kg and 3.28446 mg/kg amounted Saronggi waters. Average levels of Pb in scallop blood in the Kenjeran waters is 0.76073 mg/kg lower than lead levels in scallop blood from Saronggi waters of 2.26756 mg/kg. Based of the result of Pb levels in the biota from Saronggi waters was higher than Kenjeran waters, but the result both of them were also higher than the provision of SNI 01-7387-2009 for lead contamination of food is 0.3 mg/kg.

KEYWORDS: Contamination, Plumbum (Pb), White Shrimp and Scallop Blood