

Fahrizal Arifianto, 2005, The Toxicity of Sodium Lauryl Sulfate to Tiger Prawn's (*Penaeus monodon* Fab.) Juveniles, This Thesis is Guidance by Dr. Ir Agoes Soegianto DEA and Drs. Noer Moehammadi, M.Kes., Department of Biology, Mathematics and Natural Science Faculty, Airlangga University, Surabaya

ABSTRACT

Sodium of Lauryl Sulfate (SLS) represent the elementary substance of detergent which utilized extendedly in society because have ability as good surfaktan. Dismissal of excessive Sodium Lauryl Sulfate in number to the river and accumulate in estuari area are dangerous for organism that live in the coastal like tiger prawn (*Penaeus Monodon* Fab.). Therefore we require an research to understand the toxicity of Sodium of Lauryl Sulfate. This Research aim is to getting the value of Sodium of Lauryl Sulfate toxicity (LC50) to tiger prawn juveniles. This Research is using tiger prawn at Post Larva 2 (PL₂), Post Larva 15 (PL₁₅) And Post Larva 25 (PL₂₅) stages, which use as test species. Concentration of Sodium of Lauryl Sulfate that used in this experiment are 60%, 30%, 15%, 7.50%, 3,75% and 0% for the PL₂, for PL₁₅ the concentration of SLS is being improved become 100%, 50%, 25%, 12.5%, 6,25%, and 0%, while for PL₂₅ the concentration of SLS is being improved become 400%, 200%, 100%, 50%, 25%, 12.5% and 0%, with the assumption that higher level of PL have more higher level endurance to toxic substance than the lower ones. The experiment is done by putting 10 animals for each concentration. The observation is done on 0, 24, 36, 48, 72 and 96 hours to know the total mortality of the animals. The result then put in the table and counted by computer probit analysis *The Trimmed Spearman-Karber Method*. The Analysis shows the value of LC50-96 hour for PL₂ is 42,43 ppm , for PL₁₅ is 51,89 ppm, while for PL₂₅ showing value 336,36 ppm. Based to the value of LC50 of Sodium of Lauryl Sulfate pertained a light compound toxic (Slightly Toxic) to tiger prawn (*Penaeus monodon*) and we can conclude Sodium of Lauryl Sulfate is a light poisonous or a light dangerous compound.

Key words : *Sodium Lauryl Sulfate*, tiger prawn (*Penaeus monodon*), *Post larvae*, LC50-96 hour.