ABSTRACT

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Marble Mining activities have become very common in Tulungagung, East Java. These industrial existences are not only giving a positive implication for economy, but also presenting negative side for the ocean organism.

The composition of limestone and potassium in the marble waste can affect the wellness of human beings. The larger scale of mining activities, the greater impact will be posed. This study case is to determine the amount of toxicity (LC$_{50}$) and the effect of marble waste in fish and hydrophyte which is living in the river.

This toxicity experiment was carried out on Tilapia Fish (*Oreochromis Mossambicus*) and Anacharis Plant (*Egeria Densa*). The experimentation was conducted statically in the Laboratory searching for range finding toxicity. Variety Test I for Tilapia Fish and anacharis plant are 0%, 20%, 40%, 60%, 80%, and 100% based on the volume of toxicant. On the other hand, variety test II ranged from 12% to 60% by volume of toxicant in duple. According to test II, it is clearly shows the range of toxicity tests for Tilapia Fish and Anacharis Plant toward the volume of toxicant. Furthermore, by using the calculation of Litchfield - Wilcoxon, so that LC$_{50}$, 96 hours in Tilapia Fish and Anacharis Plant can be resolved.

Keywords : marble, acute toxicity tests, LC$_{50}$, 96 hours, *Oreochromis mossambicus*, *Egeria densa*. 