

## Cytotoxic Activity Prescreen of Leaves of Primate Consumed Plants Subclassis *dilleniidae* and *hamamelididae* Using Brine Shrimp Lethality Test

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### ABSTRACT

Brine Shrimp Lethality Test (BSLT) is a prescreened method of cytotoxic activity which one of its aim is finding a new cancer agent. The closest relatives between human and nonhuman primate emerge an idea to utilize a primate consumed plant as an alternative medicinal. In this experiment, five plants extracts from each subclassis (*Dilleniidae* and *Hamamalididae*) were tested using BSLT. The result showed that nine of ten extract were toxic ( $LC_{50} < 1000$   $\mu\text{g/mL}$ ) and the highest activity was given by Tangkolo (*Kleinhovia hospita*) extract whose  $LC_{50}$  was 88,025  $\mu\text{g/mL}$ . Furthermore, Tangkolo extract was fractionated by Liquid-Liquid Extraction using n-hexane, ethyl acetate and water. All fractions then tested by BSLT. The result showed that ethyl acetate fraction gave the highest activity. The  $LC_{50}$  value of n-hexane fraction, ethyl acetate fraction and water fraction respectively were 93,998  $\mu\text{g/mL}$ , 53,333  $\mu\text{g/mL}$  and 757,424  $\mu\text{g/mL}$ .

Keywords: Brine Shrimp Lethality Test (BSLT), cytotoxic, primate consumed plant, *Dilleniidae* and *Hamamalididae*, Tangkolo