

BIOCOMPATIBILITY TEST OF EXTRACT BINAHONG LEAF (*Anredera cordifolia*) TO CELL BHK-21

ABSTRACT

Background. Root canal treatment is one type of treatment to maintain teeth through several stages, one of them is irrigation. Requirement of irrigation material is maximum antibacterial potential, and biocompatible. Some irrigation materials have disadvantage, so started to develop alternative irrigation materials, such as extract binahong leaf (*Anredera cordifolia*). Binahong leaf (*Anredera cordifolia*) has some active compounds that have potential as antibacteri with MIC 60% dan MBC 65%. However, any materials used in dentistry must fulfill the terms of biocompatibility. **Purpose.** This research was conducted to find out biocompatibility of 60% and 65% extract binahong leaf (*Anredera cordifolia*) to cell BHK-21. **Method.** Extract binahong leaf (*Anredera cordifolia*) at the concentration 60% dan 65% applied on BHK-21 cell. Biocompatibility of this extract can be seen from the ability of cells to proliferate and was calculated by the percentage of viable cell after treatment. Cell which capable to proliferate will produce mitochondrial enzyme through respiration process that can be measures using MTT assay method by Elisa reader. **Result.** Percentage of viable BHK-21 cell culture exposed with concentration of 60% and 65% of extract binahong leaf were 10,94% and 3,94%. **Conclusion.** Extract binahong leaf at the concentration 60% and 65% is not biocompatible to BHK-21 cell.

Keywords. Irrigation material, Extract binahong leaf, Biocompatibility.