

**UJI SITOKSISITAS EKSTRAK DAUN SIRIH MERAH (*Piper Crocatum*) TERHADAP SEL FIBROBLAS BHK 21**

***CYTOXICITY TEST RED BETEL LEAF EXTRACT (*Piper Crocatum*) FOR BHK 21 FIBROBLASTS CELL***

**ABSTRACT**

**Background:** Red betel leaf extract (*Piper Crocatum*) is known to be a root canal irrigation alternative medicine because it has antibacterial effects and can dissolve the smear layer on the root canal. The red betel leaf contains saponin, tannin and flavanoids but saponin in high concentration can be toxic to human cells. **Purpose:** The aim of this study was to identify the effects of red betel leaf extract (*Piper Crocatum*) cytotoxicity in BHK 21 fibroblast cell with MTT assay. **Method.** The sample was Baby Hamster Kidney fibroblast cell (BHK 21). The red betel leaf extract (*Piper Crocatum*) divided into 5 concentrations (100%, 50%, 25%, 12,5%, 6,25%). These extracts were applied to fibroblast cell culture BHK 21 and incubated for 24 hours. After incubation, an ELISA Reader was used to read the result of this experiment. **Result.** The study shows that Red betel leaf (*Piper Crocatum*) is non-toxic in BHK 21 fibroblast cell. From the study, it also showed that increasing fibroblast proliferation occurred when Red betel leaf extract was applied to the culture. **Conclusion.** Red betel leaf (*Piper Crocatum*) extract with concentrations 100%, 50%, 25%, 12,5%, 6,25% are non-toxic and can be used in BHK 21 fibroblast cell.

**Keywords :** Red betel leaf extract, BHK 21 fibroblast cell, cytotoxicity