

ABSTRACT**VIABILITAS SEL FIBROBLAS BHK-21 (Baby Hamster Kidney-21) PADA PEMBERIAN EKSTRAK BIJI AVOKAD (*Persea americana* Mill.)****VIABILITY OF FIBROBLAST CELLS BHK-21 (Baby Hamster Kidney-21) IN GIVING AVOCADO SEED EXTRACT (*Persea americana* Mill.)**

Background: *Persea americana* Mill. is one of tropical plants used as herbal materials due to containing important bioactive ingredients. Cytotoxic test was conducted to determine the effect of a substance on cell viability. However, cytotoxicity test of herbal ingredients majority not been yet explained scientifically.

Purpose: This study was to determine the viability of fibroblast cell BHK-21 (Baby Hamster Kidney-21) toward avocado seed extract (*persea americana* mill.) using MTT assay. **Methods:** The extraction method used in this study was the percolation technique with 96 % ethanol solvent and then phytochemical test to determine the active ingredient in avocado seed extract. Before the cytotoxic test, avocado seed extract was made in a series of concentration by the method of dilution with a concentration of 50 %, 25 %, 12.5 %, 6.25 % and 3.125 %. Furthermore, the cytotoxic test against fibroblast cells BHK – 21 using MTT method. The data obtained from the results of the ELISA reader was analyzed the data distribution using One - Sample Kolmogrov - Smirnov Test, and then the data homogeneity using Levene's Test. One -way variance test using One - Way ANOVA was used to determine the significance of data between the treatment group and continued significance test data between treatment groups with the control group using Different Least significant test (LSD). **Results:** This study showed that the extract at concentrations of 50% and 25% had IC_{50} values above 50% is equal to 132.11%, and 73.27% of fibroblast cells BHK - 21. At concentrations of 12.5%, 6.25% and 3.125 % have IC_{50} values below 50% which amounted to 48.7%, 38.79% and 31.89%. **Conclusion:** It can be concluded that the avocado seed extract is toxic to cultur of fibroblast cells BHK – 21 at a concentration of 3.125% , 6.25% and 12.5%, whereas at a concentration of 25% and 50% are not toxic to cultur of fibroblast cells BHK – 21.

Key words : Seeds of avocado (*Persea americana* Mill.), viability, fibroblast cells BHK - 21