UJI SITOTOKSISITAS EKSTRAK AKAR KECUBUNG (Datura metel L.)
PADA SEL FIBROBLAS DENGAN MENGGUNAKAN ESEI MTT

CYTOTOXICITY TEST OF AMETHYST ROOT EXTRACT
(Datura metel L.) ON FIBROBLAST CELL USING
MTT ASSAY

ABSTRACT

Background. Antibiotic resistance could occur due to excessive use of antibiotics or using antibiotics without supervision of a doctor. Resistance to certain antibiotics may cause some failure in treatment of infectious disease. Root of amethyst contains antibacterial contents named flavonoid, tannin and saponin. Natural ingredients do not cause toxic effects, but scientific studies have not been performed to prove that the natural material is not toxic. Purpose. The aim of this study is to determine the toxicological properties of amethyst root extract on fibroblast BHK-21. Method. Microplate containing fibroblasts BHK-21 cells that had been exposed to three concentration of amethyst root extract (10%, 17.5% and 25%) was incubated 5% CO₂ at a temperature of 37°C in the incubator for 20 hours. The results of MTT assay can be seen from the absorbent solution fromazan crystals through specific wavelength 620 nm with elisa reader. Result. Number of fibroblasts BHK-21 which alives after the exposure of amethyst root extract on each three concentrations shows that the viability is above 50%. Conclusion. Amethyst root extract (Datura metel L.) is not toxic against fibroblasts.

Keywords: Datura metel L, cytotoxicity test, fibroblast BHK-21, mtt assay