

## ABSTRACT

Kurlila, Anis. 2013. **Influence of the Extract Gotu kola (*Centella asiatica* Linn.) against the growth of Primary Cell Cultures Hepar Baby Hamster Being 7.12-Dimetilbenz ( $\alpha$ ) antrasen.** Thesis, Department of Biology, Faculty of science and technology of State Islamic University Maulana Malik Ibrahim of Malang. Biology Advisor: Dr. drh. Hj. Bayyinatul Muchtaromah, M.Si; Religy Advisor: M.Imamuddin, M.A

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Cancer is the growth and development of cells that are abnormal and uncontrollable. Environmental factors have been identified the cause of the occurrence of cancer in hepar derived from ingredients that are carcinogenic polycyclic aromatic compounds, such as hydrocarbons (PAH) i.e. 7.12-Dimethylbenz( $\alpha$ )anthracene. Indonesia has a range of plants that are efficacious for treatment, one of them namely Gotu kola. Gotu kola is wild herbs that contain active compounds triterpen saponins include asiaticoside and madecassoside, Asiatic, centelloside acid. The purpose of this research is to know the influence of extract Gotu kola (*Centella asiatica* Linn.) against the growth and cytotoxicity of primary Cell cultures hepar *baby hamster* being 7.12-Dimethylbenz( $\alpha$ )anthracene.

This research uses experimental design with 7 treatments and three times repeats. The treatment used is the new breed of primary culture of cells being the hepar 7.12-Dimethylbenz( $\alpha$ )anthracene during the 48 hours, then given pegagan extract for 24 hours with a concentration of 250  $\mu\text{g/mL}$ , 500  $\mu\text{g/mL}$ , 1000  $\mu\text{g/mL}$ , 2000  $\mu\text{g/mL}$ , 4,000  $\mu\text{g/mL}$ , which are grown in DMEM medium with 10% FBS. After the incubation period, primary cell culture of hepar *baby hamsters* observed Confluent, viability, and Cytotoxicity cells.

The results showed that the extract is able to decrease the cell konfluen Gotu kola, cell viability, and it can cause the death of a cell by the value of Cytotoxicity extract is expressed with the LC50 of 874.7228  $\mu\text{g/mL}$  (LC50 < 1000  $\mu\text{g/mL}$  , the extract is toxic).