ABSTRACT

POTENCY RUMPUT MUTIARA LEAF (*Hedyotis corymbosa* (L.) Lamk) EXTRACT ON PROLIFERATION OF ORAL CANCER CELL IN *Rattus norvegicus* strain Wistar INDUCED BENZOPYRENE

Background: Cancer still occupy the fifth position of mortality and morbidity causes in Indonesia. Cancer is caused by uncontrolled cells proliferation. Some alternative therapies to treat cancer are surgery, radiotherapy, chemotherapy and pharmacotherapy. These therapies were more expensive, uneffective nor efficient, so that the use of herbal medicine can minimize those disadvantages. Rumput mutiara leaf has ursolat acid as antiproliferative. Purpose: To determine potency of rumput mutiara leaf dose 375, 750 and 1500 mg/kgBB as antiproliferative cancer cells in oral cavity. Methods: We have used the post test only design in this research. There have been 25 *Rattus novergicus* as research samples, and those were divided into 4 groups, group 1 as control, group 2 has given dose 375 mg/kgBB, group 2 has given dose 750 mg/kgBB, group 3 has given dose 1500 mg/kgBB. Their oral cavity induced intramuscularly by benzopyrene dose 8 mg/kgBB 4 weeks (twice a week) for occurred cancer. It was followed by aplicated rumput mutiara leaf orally 10 days. All samples were aclimatitation to perform Histo Pathology Anatomia among groups. The data were tabulated and analyzed statistically used ANOVA. Result: There is significant difference decreased of cancer cells proliferation between control and treatment group. In samples given dose 750 mg/kgBB showed the most significant decrease of cancer cells proliferation. Conclusion: rumput mutiara leaf could decrease cancer cells proliferation. In this research, the optimal dose to decrease cancer cells proliferation is rumput mutiara leaf dose 750 mg/kgBB. Suggested this extract as preventive and curative of oral cancer.

Key words: rumput mutiara leaf, ursolat acid, oral cancer, antiproliferative, benzopyrene.