

International Conference on
CLINICAL PHARMACY

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International Conference on
BIOCONTROL, BIOSTIMULANTS & MICROBIOME

September 06-07, 2018 | Zurich, Switzerland

Effectiveness study of brown algae extract (*Sargassum Cristaeofolium*) as platelet anti agregation *in vivo*Marianti Manggau, Ahmad Hidayat, Wira Bahari Nurdin and Subehan
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The effectiveness test of brown algae extract (*Sargassum cristaefolium*) as platelet anti aggregation has been done based on the time of bleeding and blood clotting of mice (*Mus musculus*). This study aims to compare the effects of brown algae extract with aspirin to time of bleeding and blood clotting. The study included the extraction of brown algae using aquades at a temperature of 85°C. Twenty mice were divided into 4 treatment groups, namely negative control group (aquadest), treated with brown algae 200 mg/kgBW group, with 400 mg/kgBW brown algae and treated with aspirin 0.85 mg / 20 g BW as positive control group. Measurement of bleeding time and blood clotting was done after 60 minute treatment by cutting the tail of the mouse 0.5 cm from the tail end. Measurement of bleeding time was done every 30 seconds of discharged blood dropped on absorbent paper until bleeding stopped, while measurement of blood coagulation time was done by dropping 2-3 drops of blood on objectglass and the

formation of fibrin from blood specimens every 30 seconds using langset was observed. The result of statistical test of bleeding time showed that the negative control and brown algae 200 mg / kg of BW were significantly difference to the 400 mg/kgBW brown algae treatment and the aspirin treatment as positive control. Treatment of 400 mg/kgBW brown algae did not show significantly difference to aspirin. The test result of the blood coagulation time showed that the negative control treatment did not show significantly differ to the 200 mg/kg of BW brown alga treatment, whereas the negative control treatment showed significantly differ to 400 mg/kg BW brown algae treatment and the positive control. Treatment of 400 mg/kg BW brown algae did not significantly differ to the aspirin as positive control. So it is concluded that the treatment of 400 mg/kgBW brown algae has a comparable effect to the aspirin and has an anti platelet aggregation effect.

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