

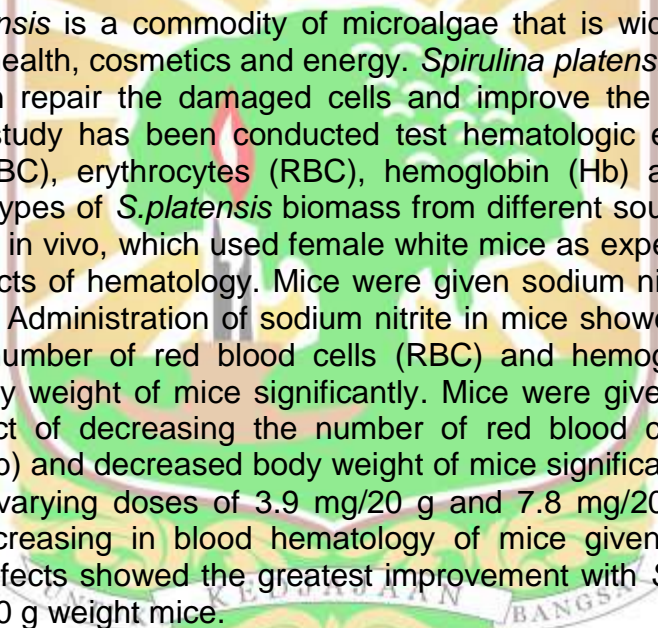
ABSTRACT

HEMATOLOGY EFFECTS FROM TWO KINDS OF *Spirulina platensis* BIOMASS ON WHITE MICE INDUCED BY NaNO_2

by:

Aubrey Ridha Hadyana (1210413006)

Marniati Salim, M.S dan Dr. Armaini, M.S



Spirulina platensis is a commodity of microalgae that is widely used in the fields of food, health, cosmetics and energy. *Spirulina platensis* is widely used because it can repair the damaged cells and improve the body's immune system. This study has been conducted test hematologic effects, such as leukocytes (WBC), erythrocytes (RBC), hemoglobin (Hb) and hematocrite (HCT) on two types of *S.platensis* biomass from different sources. The study was conducted in vivo, which used female white mice as experimental animal to test the effects of hematology. Mice were given sodium nitrite (NaNO_2) to cause anemia. Administration of sodium nitrite in mice showed a decreasing effect in the number of red blood cells (RBC) and hemoglobin (Hb) and decreased body weight of mice significantly. Mice were given sodium nitrite gives the effect of decreasing the number of red blood cells (RBC) and hemoglobin (Hb) and decreased body weight of mice significantly. *S.platensis* was given by varying doses of 3.9 mg/20 g and 7.8 mg/20 g weight mice showed an increasing in blood hematology of mice given sodium nitrite. Hematologic effects showed the greatest improvement with *S.platensis* dose given 3.9 mg/20 g weight mice.

Keywords : *Spirulina platensis*, Sodium nitrite, Hematology