

**P23: SUBACUTE EFFECTS OF *CENTELLA ASIATICA* ETHANOLIC EXTRACT ON CLINICAL BLOOD CHEMISTRY AND HEMATOLOGY IN RATS**

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**ABSTRACT**

*Centella asiatica* (Linn.) Urban, called in Thai as Bua bok, is a plant in family Umbelliferae. In this study, stems and leaves of *C. asiatica* were extracted with 80% ethanol. Subacute effect of the ethanolic extract was investigated on clinical blood chemistry and hematology. Thirty male Wistar rats were randomly divided into 3 treatment groups. Each group comprised 10 rats. Rats in the first group were given distilled water orally once daily for 30 days, serving as a control group. Rats in the second and the third groups were given *C. asiatica* ethanolic extract orally at dosages of 250 mg/kg/day and 1,000 mg/kg/day for 30 days, respectively. At the end of the treatment period, rats were anesthetized. Blood samples were collected by heart puncture and serum samples were prepared for determining hematology and clinical blood chemistry, respectively. *C. asiatica* ethanolic extract did not produce any changes on these following clinical blood chemistry and hematology : glucose, blood urea nitrogen (BUN), creatinine (Cr), aspartate aminotransferase (AST), alanine aminotransferase (ALT), alkaline phosphatase (ALP), total bilirubin, direct bilirubin, total cholesterol, triglyceride (TG), low density lipoprotein-cholesterol (LDL-C), high density lipoprotein-cholesterol (HDL-C), uric acid, electrolytes (Na, K, Cl), complete blood count (CBC), white blood cell (WBC) count, %differential WBC, platelet count, red blood cell (RBC) morphology, and RBC indices (% mean corpuscular volume, MCV; % mean corpuscular hemoglobin, MCH; and % mean corpuscular hemoglobin concentration, MCHC). Results from this study implied that *C. asiatica* caused no harmful effects on various important organs/systems at the doses of pharmacologically active. Thus, this plant is valuable to be developed for using therapeutically in the future.

**Key words :** *Centella asiatica*, clinical blood chemistry, hematology, subacute effects