P22: SUBACUTE EFFECTS OF *MURDANNIA LORIFORMIS* ETHANOLIC EXTRACT ON CLINICAL BLOOD CHEMISTRY AND HEMATOLOGY IN RATS

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ABSTRACT

Murdannia loriformis (Hassk). Rolla Rao et Kamnathy is commonly called in Thai as "Ya Pak King". *M. loriformis* has been used traditionally as a remedy treatment in many kinds of cancers. This study examined subacute effects of *M. loriformis* ethanolic extract on clinical blood chemistry and hematology. Thirty male Wistar rats were randomly divided into three treatment groups. Each group consisted of ten rats. Rats in the first group were given distilled water 1 ml/kg/day serving as a control group. The other two groups of rats were given *M. loriformis* ethanolic extract at dosages of 0.1 and 1 g/kg/day. Each group were administered orally for 30 consecutive days. During the treatment peroid, body weight was recorded every week. At the end of the treatment peroid, rats were anesthesized. Blood samples were collected by heart puncture and serum samples were prepared for measuring hematology and clinical blood chemistry, respectively. The results showed that rat received both dosage regimens of *M. loriformis* ethanolic extract demonstrated no mortality when administered orally for 30 consecutive days. *M. loriformis* ethanolic extract at both dosages given in this study did not affect body weight, and these following clinical blood chemistry and hematology: AST, ALT, ALP, total bilirubin, direct bilirubin, BUN, SCr, total cholesterol, TG, LDL-C, HDL-C, glucose, sodium, potassium, chloride, hemoglobin, hematocrit, platelet count, WBC count, % differential WBC, RBC indices (% mean corpuscular volume, MCV; % mean corpuscular hemoglobin, MCH; % mean corpuscular hemoglobin concentration, MCHC) and RBC morphology. These results suggested that *M. loriformis* ethanolic extract caused no harmful effects on several important organs/systems such as liver, kidney, blood system, electrolytes as well as carbohydrate and lipid metabolism.

Key words : *Murdannia loriformis*, clinical blood chemistry, hematology, subacute effects