

Haematological and histopathological evaluation of dried kacangma (*Leonurus sibiricus*) in New Zealand White rabbits

ABSTRACT

Kacangma (*Leonurus sibiricus* L.) is a popular traditional herb that has been consumed for decades by the people of Sarawak as herbal medicine and culinary ingredient. This study was conducted to evaluate the toxicity of kacangma herb on New Zealand White male and female rabbits through subchronic studies. Effects of kacangma herb intake at the level of 0.5, 5.0 and 25.0 g/kg body weight was evaluated for 90 days with focus on hematological and histopathological studies. The haematological study revealed no significant changes in all parameters studied i.e. haemoglobin, red blood cell value, white blood cell value, packed cell volume, mean cell volume, mean cell haemoglobin and mean cell haemoglobin concentration. Vice versa, in the histopathological study, administration of dried kacangma herb at medium and high dose was found to cause adverse effects on histopathological structure in liver and kidney of both male and female rabbits. However, since low dose group showed no significant differences to the control group, therefore it is considered safe and less chance of developing toxicity if the herb is consumed at the low dose of 0.5 g/kg body weight as observed throughout the 90 days period of subchronic study.

Keyword: *Leonurus sibiricus*; Toxicity evaluation; Haematology; Histopathology; New Zealand White rabbits