

Acute and subchronic toxicity studies of an aqueous extract of *Morinda citrifolia* fruit in rats

ABSTRACT

This experiment was conducted to evaluate the toxicity of an aqueous extract *Morinda citrifolia* fruit on Sprague-Dawley male rats through acute (LD50) and subchronic studies. In the LD50 test, rats were given three dosages of *M. citrifolia* extracts (1.0, 2.0 and 3.0 g/kg of body weight). They were observed for any toxic signs, especially death for the first 24 hours and continued up to 14 days. In the subchronic study, effects of *M. citrifolia* extracts in rats (0.25, 0.50 and 1.0 g/kg of body weight) were determined for 6 weeks by measuring the blood biochemical parameters such as plasma glucose, cholesterol, triglyceride, total protein, albumin, urea, creatinine and enzymes (aspartate transaminase, alanine transaminase, alkaline phosphatase, lactate dehydrogenase and glutamyl transferase).

Keyword: *Morinda citrifolia*; Acute toxicity; Subchronic toxicity; Kidney function test; Liver function test; Sprague-Dawley rats