Evaluation of free radical scavenging, antiinflammatory and wound healing effects of Nephelium lappaceum leaf extract

ABSTRACT

Nephelium lappaceum also known as Rambutan is a locally grown popular tropical fruit grown in these parts of Asia. 2,2-diphenyl-1-picrylhydrazyl (DPPH) model of in vitro free radical scavenging test was performed with leaf extracts. The extract was also tested on wound healing activity using mice excision model. The anti-inflammatory effect was tested in mice using the formalin induced paw licking test model. In the DPPH test, Nephelium lappaceum leaf extract at all concentrations was found to cause significant free radical inhibition ($p<0.05$). All concentrations of Nephelium lappaceum leaf extract showed significantly ($p<0.05$) high wound contraction on Day 6. In the animal model of inflammation, all doses of Nephelium lappaceum showed reduced number of paw licking. In conclusion, Nephelium lappaceum leaf extract demonstrated in vitro free radical scavenging, anti-inflammatory and wound healing effects.

Keyword: Nephelium lappaceum; Free radical scavenging; Anti-inflammatory; Wound healing