

Antinociceptive and anti-inflammatory activities of *Dicranopteris linearis* leaves chloroform extract in experimental animals

ABSTRACT

The present study was carried out to establish the antinociceptive and anti-inflammatory properties of *Dicranopteris linearis* leaves chloroform extract in experimental animals. The antinociceptive activity was measured using the abdominal constriction, formalin and hot plate tests, while the anti-inflammatory activity was measured using the carrageenan-induced paw edema. The extract, obtained after 72 h soaking of the air-dried leaves in chloroform followed by evaporation under vacuo (40°C) to dryness, was dissolved in dimethyl sulfoxide to the doses of 20, 100 and 200 mg/kg and administered subcutaneously 30 min prior to subjection to the above mentioned assays. The extract, at all doses used, was found to exhibit significant ($p < 0.05$) antinociceptive activity in a dose-dependent manner. However, the significant ($p < 0.05$) anti-inflammatory activity observed occur in a dose-independent manner. As a conclusion, the chloroform extract of *D. linearis* possesses antinociceptive and anti-inflammatory activity and thus justify its traditional uses by the Malays to treat various ailments.

Keyword: Anti-inflammatory activity; Antinociceptive activity; Chloroform extract; *Dicranopteris linearis*