

Anti-inflammatory and anti-nociceptive activities of the ethanolic extract of *Annona muricata* leaf.

ABSTRACT

Ethanolic extract of *Annona muricata* leaf (AML) was used to investigate its anti-inflammatory and antinociceptive activities by using carrageenan - induced oedema model and acetic acid induced writhing test. AML exhibited significant and dose-dependent anti-inflammatory activity at a dose of 10, 30, 100 and 300 mg/kg when administered orally. It is also demonstrated that the intraperitoneal administration of AML at a dose of 30, 100 and 300 mg/kg produced significant inhibition of abdominal constriction induced with 0.6% (v/v) acetic acid in dose dependent manner. These results indicate that AML exhibits significant anti-inflammatory and antinociceptive effects.

Keyword: Acetic acid induced writhing; *Annona muricata*; Carrageenan-induced oedema