

Anti-inflammatory and anti-pyretic effects of hexane fraction of *Ardisia crispa* Thunb. D.C.

ABSTRACT

Hexane fraction of *Ardisia crispa* root (ACHE) was used to investigate its anti-inflammatory and anti-pyretic activities in this study. For anti-inflammatory activity, 12-O-tetradecanoylphorbol-13-acetate (TPA) was applied to ear of mice to induce oedema and treated with 0.5, 1 and 2mg/ear of ACHE topically. In cotton-pellet granuloma test, treated groups have received 3, 10, 30 and 100mg/kg of hexane extract administered orally for 7 days. For antipyretic activity, brewer's yeast was injected in mice to induce fever and later, ACHE at dose ranging from 10 to 300 mg/kg were administered to the rats orally. The results exhibited that 1 and 2mg/ear of ACHE produced significant suppression by 19.9% and 20.2% respectively. the lowest dose of ACHE showed no significant effect when compared with control. Results showed that ACHE showed significant anti-pyretic effect at all doses (10, 30, 100 and 300 mg/kg). At 30, 100 and 300mg/kg, ACHE even exhibited higher efficacy when compared with 100 mg/kg acetaminophen. ACHE also elicited a significant ($P < 0.05$) inhibition of granuloma tissue and exudate formation. Thus, it can be concluded that *Ardisia crispa* possesses antiinflammatory and antipyretic effects.

Keyword: Anti-pyretic; *Ardisia crispa*; Brewer's yeast- induced fever; Cotton pellet-induced granuloma; TPA - Induced ear oedema