



Research article

LC/MS, GC/MS screening and *in vivo* anti-inflammatory activity of Malaysian *Moringa oleifera* Lam leaf extracts and fractions against carrageenan -induced paw oedema in rats

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Abstract

The anti-inflammatory activity of three extracts of *Moringa* leaf and the fractions of most active extracts was evaluated. Carrageenan-induced paw oedema in rats was used to evaluate the anti-inflammatory activity and to determine the effective dose of *M. oleifera* leaf extract and its fractions. In addition to that, LC/MS and GC/MS analysis of most active fraction were used to identify the phytoconstituents. 95% ethanol extract, at dose of 250 mg/kg body weight in rat, and its dichloromethane fraction found to be the most active as anti-inflammatory. LC/MS identified 18 compounds and GC/MS identified 8 compounds including flavinoids, phenol glucosides, amino acids and vitamin. A more detailed studies, including in human studies, to identify the phytochemical(s) and to establish the mechanism of action responsible for anti-inflammatory activity are highly recommended.