Anti-inflammatory and sedative activities of Peperomia galioides: in vivo studies in mice

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Abstract

Aerial parts (leaves, flowers, stem) of Peperomia galioides extract administered to mice, was used to confirm its anti-inflammatory and sedative folk uses. The anti-inflammatory activity was assessed by croton oil-induced ear oedema and myeloperoxidase (acute inflammation); cotton pellet-induced granuloma (sub-acute inflammation).
inflammation) and *Escherichia coli* Lipopolysaccharide (LPS) induced inflammation (cellular mediators). The sedative activity was studied by the pentobarbital-induced sleeping time test. Single doses (300 and 600 mg/kg; i.p.) of the extract reduced croton oil-induced ear oedema and myeloperoxidase activity. Six days administration of the extract (300 mg/kg, i.p.) to mice implanted with cotton pellets diminished granuloma formation. LPS (20 mg/kg, i.p.) enhanced plasma nitrites and TNF-α levels that were inhibited by the extract. The duration but not the onset of sleeping time was enhanced by 300 and 600 mg/kg of the extract. Our results show that *P. galioides* has anti-inflammatory and sedative activities in mice, which validates its traditional use.

Keywords: anti-inflammatory, sedative activity, *Peperomia galioides*, mice models
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