

Chemical study and anti-inflammatory, analgesic and antioxidant activities of the leaves of *Aristolelia chilensis* (Mol.) Stuntz, Elaeocarpaceae

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Objectives *Aristolelia chilensis* leaves (Elaeocarpaceae) are used in Chilean folk medicine to treat pain and inflammation. A bioguided study was carried out on serial extracts (hexane, dichloromethane, methanol, aqueous extract (INFU) and a crude mixture of alkaloids (ALK-MIX). All extracts were evaluated for (1) topical administration against both arachidonic acid and 12-deoxyphorbol-13-decanoate (TPA)-induced inflammation in mice and (2) per-os administration against inflammation by β -carrageenan-induced paw oedema in guinea-pigs and (3) topical analgesia in tail flick and formalin models and per-os writhing test in mice. Methods Greater anti-inflammatory effects were obtained against TPA with dichloromethane extract and methanol extract (63.9 and 66.0%, respectively). INFU showed the most potent effect (56.2%) against arachidonic acid. Greater effects were obtained in the writhing test with hexane and dichloromethane extracts (89.2% both). In the topical analgesia models, all the ex