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Short Communication

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Topical Anti-inflammatory Effect of Creams containing Kaurenoic Acid Isolated from *Wedelia paludosa* in Mice

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***SUMMARY*. The aim of this work is to evaluate *in vivo* the anti-inflammatory effect of creams containing kaurenoic acid (KA), isolated from the acetonic extract of the *W. paludosa* (stems and roots). The herbal drug was incorporated into anionic cream (Lanette®) at 100 μg/g. Creams containing different permeation enhancers (urea, alpha bisabolol, isodecyl oleate, isopropyl myristate, soy lecithin) were prepared, and the *in vivo* topical anti-inflammatory effect was evaluated by the croton oil-induced ear edema method in mice using dexamethasone cream (5 mg/g) and Acheflan® (essential oil of *Cordia verbenacea* 5 mg/g) as positive control. The potential cutaneous irritation was evaluated by the agarose overlay assay. KA cream, KA and isopropyl myristate and soy lecithin cream and dexamethasone cream presented inhibition of ear edema of 61.73 ± 23.23%, 71.71 ± 15.77% and 64.45 ± 13.41%, respectively. These results suggest that KA incorporated in the cream showed a greater anti-inflammatory effect than positive control, while KA cream containing a concentration lower than dexamethasone cream presents a statistically similar ear edema reduction compared with the control, with no potential cutaneous irritation being observed.**

KEY WORDS: Anti-inflammatory effect, Kaurenoic acid, Phytodrug, *Wedelia paludosa*.

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