Topical Anti-inflammatory Activity of Flavonoids and a New Xanthone from *Santolina insularis*

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Bioactivity-guided fractionation of the methanol extract from the leaves of *Santolina insularis* led to the isolation of one new xanthone, \((E)\)-3-{6-[(E)-3-hydroxy-3-oxo-1-propenyl]-9-oxo-9H-xanthen-2-yl]}-2-propenoic acid, together with six known flavonoids: hispidulin, nepeitin, cirsimaritin, rhamnocitrin, luteolin and luteolin 7-O-\(\beta\)-d-glucopyranoside. The structures were elucidated by means of 1D-, 2D-NMR spectroscopy and mass spectrometry. The topical anti-inflammatory activity of all isolated compounds and extracts was investigated employing the croton oil-induced dermatitis in mouse ear. The most active compound, luteolin, showed an ID50 of 0.3 \(\mu\)mol/cm2 and prevented ear oedema more effectively than an equimolar dose of indomethacin within 24 h.

Key words: *Santolina insularis*, Anti-inflammatory Activity, Flavonoids