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

Filippo Cottiglia^{a,*}, Laura Casu^a, Leonardo Bonsignore^a, Mariano Casu^b, Costantino Floris^b, Silvio Sosa^c, Gianmario Altinier^c, and Roberto Della Loggia^c

a Dipartimento Farmaco Chimico Tecnologico, Facoltà di Farmacia, Università di Cagliari,
 Via Ospedale 72, 09124 Cagliari, Italy. Fax: +390706758553. E-mail: cottiglf@unica.it
 b Dipartimento di Scienze Chimiche, Università di Cagliari, Cagliari, Italy

Dipartimento di Economia e Merceologia, Università di Trieste, Trieste, Italy
 * Author for correspondence and reprint requests

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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-9*H*-xanthen-2-yl}-2-propenoic acid, together with six known flavonoids: hispidulin, nepetin, cirsimaritin, rhamnocitrin, luteolin and luteolin 7-*O*- β -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 μ mol/cm² and prevented ear oedema more effectively than an equimolar dose of indomethacin within 24 h.