

Anti-Inflammatory and Antinociceptive Activity of Coumarins from *Seseli gummiferum* subsp. *corymbosum* (Apiaceae)

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n-Hexane and ethyl acetate extracts as well as coumarin derivatives obtained from the *n*-hexane extract of the aerial parts of *Seseli gummiferum* Pall. ex Sm. subsp. *corymbosum* (Boiss. & Heldr.) P.H. Davis (Apiaceae) were evaluated *in vivo* for their anti-inflammatory and antinociceptive activities. The *n*-hexane and ethyl acetate extracts of the species were shown to possess significant inhibitory activity against the carrageenan-induced hind paw edema and *p*-benzoquinone-induced writhing models in mice. Among the isolated coumarin derivatives; (–)-(3′S,4′S)-3′-acetoxy-4′-isovaleryloxy-3′,4′-dihydroseselin (**1**), (–)-(3′S,4′S)-3′-acetoxy-4′-angeloyloxy-3′,4′-dihydroseselin (**2**), (+)-(3′S,4′S)-3′-hydroxy-4′-angeloyloxy-3′,4′-dihydroseselin (D-laserpitin) (**3**), (–)-(3′S,4′S)-3′-angeloyloxy-4′-hydroxy-3′,4′-dihydroseselin (**4**), and osthole (**5**), only the 3′-acetoxy derivatives **1** and **2** were found to possess potent antinociceptive and anti-inflammatory activities, *per os*, without inducing any apparent acute toxicity as well as gastric damage, while all other compounds and extracts were found to be ineffective in the TPA-induced mouse ear edema model assay.

Key words: Apiaceae, Anti-Inflammatory Activity, Antinociceptive Activity