

Anti-Inflammatory and Antinociceptive Activity of Flavonoids Isolated from *Viscum album* ssp. *album*

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Viscum album L. has been used in the indigenous systems of medicine for treatment of headache and some inflammatory diseases. In order to evaluate this information, antinociceptive and anti-inflammatory activities of the five flavonoids (5,7-dimethoxy naringenin or 4',6'-dimethoxy chalcononaringenin) derivatives, isolated from the ethyl acetate fraction of the extract from *V. album* ssp. *album*, were investigated, namely 5,7-dimethoxy-flavanone-4'-*O*- β -D-glucopyranoside (**1**), 2'-hydroxy-4',6'-dimethoxy-chalcone-4-*O*- β -D-glucopyranoside (**2**), 5,7-dimethoxy-flavanone-4'-*O*-[2''-*O*-(5'''-*O*-*trans*-cinnamoyl)- β -D-apiofuranosyl]- β -D-glucopyranoside (**3**), 2'-hydroxy-4',6'-dimethoxy-chalcone-4-*O*-[2''-*O*-(5'''-*O*-*trans*-cinnamoyl)- β -D-apiofuranosyl]- β -D-glucopyranoside (**4**), 5,7-dimethoxy-flavanone-4'-*O*-[β -D-apiofuranosyl-(1 \rightarrow 2)]- β -D-glucopyranoside (**5**). For the antinociceptive activity assessment the *p*-benzoquinone-induced writhing test and for the anti-inflammatory activity the carrageenan-induced hind paw edema model in mice were used. The ethyl acetate fraction in a dose of 250 mg/kg as well as compounds **2** and **5** in a 30 mg/kg dose were shown to possess remarkable antinociceptive and anti-inflammatory activities *per os* without inducing any apparent acute toxicity as well as gastric damage.

Key words: *Viscum album*, Flavonoids, Anti-Inflammatory, Antinociceptive