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Prenylated phenolics with anti-inflammatory effects

Karel Šmejkal^{1,*}, Jan Hošek², Milan Malaník¹, Markéta Gazdová¹ and Jakub Treml²

- ¹ University of Veterinary and Pharmaceutical Sciences Brno, Faculty of Pharmacy, Department of Natural Drugs, Palackého 1946/1, 61242, Czech Republic,
- ² University of Veterinary and Pharmaceutical Sciences Brno, Faculty of Pharmacy, Department of Molecular biology and Pharmaceutical Biotechnology, Palackého 1946/1, 61242, Czech Republic

E-mail: karel.mejkal@post.cz

The biological activity of phenolics is often modified and enhanced by prenylation by prenyl and geranyl; higher terpenoid chains are rare. The type of the prenyl connection and modification affects their biological activity. The lecture shortly summarizes the effects of prenylated phenolics *in vitro* in cellular or biochemical systems on the production and release of inflammation-related cytokines; their effects on the inhibition of cyclooxygenases and lipoxygenases; the effects on the production of nitric oxide, an antiradical and antioxidant activity, and the effect on the inhibition of the release of enzymes and mediators from neutrophils, mast cells and macrophages. We would show some of our confirmations of selected prenylated flavonoids, 2-arylbenzofurans, and stilbenes as potential antiphlogistic substances. The information about the antiphlogistic potential of prenylated phenolics gives the idea that a big pool of natural prenylated phenols represents a source of inspiration for synthesis, and that prenylated phenols are active principles of various medicinal plants used to combat inflammation.

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